ECEMBER 1982 NUMBER 460 -- Part II

Solar-Geophysical Data
comprehensive reports

Data for June 1982, July 1980 & Miscellanea

Explanation of Data Reports Issued as Number 450 (Supplement) February 1982

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Solar - Geophysical Data

NO. 460 DECEMBER 1982

Part II (Comprehensive Reports)

DATA FOR
JUNE 1982
JULY 1980

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NATIONAL GEOPHYSICAL DATA CENTER
BOULDER, COLORADO

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SOLAR-GEOPHYSICAL DATA

No. 460

Issued in two parts

Helen E. Coffey, Editor

Joe H. Allen, Chief
Solar-Terrestrial Physics Division

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"449A 50" listed under 1981 Nov means that the sunspot drawings for Nov 1981 were contained in Solar-Geophysical Data Number 449 - Part I, beginning on page 50.

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----- = no data available.
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SGD 460 Part II (Comprehensive)

JUNE 1982 DATA

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Mass Ejections from the Sun 113-114

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JUNE 1982

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
01	260	ONDR	44	NS	0551.0E	0706.0U	169.0D	26.0			
	260	ONDR	43	NS	1013.0	1044.0	103.0				
	200	HIRA	46	C	0033.5	0033.8	1.3	130.0	12.0		0
	500	HIRA	1	S	0034.6	0034.7	.6	4.0	3.0		0
	500	HIRA	45	C	0037.6	0038.7	2.0	5.0	3.0		0
	2000	TYKW	5	S	0600.0	0600.7	5.0D	2.5	1.0D		
	3100	CRIM	20	GRF	0645.0	0648.5	13.0	16.0	4.0		
	930	BORD	8	S	0646.0	0646.0	.2	47.0	2.0		
	2950	GORK	20	GRF	0652.3	0655.0	14.6	21.0	10.0		
	2000	TYKW	5	S	0654.0	0658.5	25.0	36.0	13.0		
	1000	TYKW	5	S	0654.0	0702.3	30.0	51.0	14.0		
	2840	PEKG	3	S	0654.0	0658.0	14.0	24.4	8.4		
	536	ONDR	27	RF	0654.0	0702.5	25.0	42.0	23.0		
	9400	TYKW	5	S	0655.0	0657.5	12.0	3.0	1.5		
	3750	TYKW	5	S	0655.0	0657.8	20.0	13.0	4.0		
	2650	DWIN	3	S	0655.0	0658.0	10.0	30.0	20.0		
	930	BORD	3	S	0655.0	0702.0	17.0	34.0	16.0		
	950	GORK	20	GRF	0655.5	0702.0	14.2	31.0			
	650	GORK	21	GRF	0655.7	0709.7	26.1	8.0			
	1415	MANI	20	GRF	0656.0	0702.0	16.5	18.1	6.2		
	808	ONDR	27	RF	0656.7	0703.0	14.5	58.0	38.0		
	650	GORK	4	S/F	0657.0	0701.8	12.0	45.0	22.0		
	500	HIRA	45	C	0657.0	0702.6	17.0	68.0	25.0		0
	2695	MANI	20	GRF	0658.2	0659.6	10.8	28.0	9.3		
	606	MANI	20	GRF	0659.0	0703.9	11.5	41.0	13.6		
	260	ONDR	27	RF	0659.0	0706.5	19.0	66.0	27.0		
	200	HIRA	46	C	0700.0U	0706.3	22.0U	90.0	13.0		
	204	IZMI	25	R	0700.0	0710.0	20.0	20.0	11.0		
	127	TORN	7	C	0700.9	0705.3	5.5	9000.0	2300.0		
	100	HIRA	46	C	0701.5U	0703.8	7.0U	8700.0	1800.0		
	2000	TYKW	21	GRF	0755.0	0807.0	75.0D	3.0	2.5D		
	1000	TYKW	21	GRF	0756.0	0803.0	70.0D	6.0	3.5D		
	3750	TYKW	20	GRF	0800.0	0834.0	70.0	8.0	3.0		
	2000	TYKW	20	GRF	0814.0	0834.0	50.0	15.0	7.0		
	2950	GORK	20	GRF	0818.5	0833.5	37.5	11.7	5.6		
	1000	TYKW	20	GRF	0819.0	0834.0	40.0	9.0	5.0		
	930	BORD	8	S	0848.5	0848.7	.3	51.0	2.0		
	430	KRAK	42	SER	0849.0	0856.8	22.0	130.0			
	430	KRAK			0849.0	0906.5		114.0			
	810	KRAK	42	SER	0856.7	0856.8	13.2	20.0			
	810	KRAK			0856.7	0906.5		29.0			
	9400	HIRA	22	GRF	1329.1	1402.8	55.5	4.7	2.3		R
	9400	HUAN	20	GRF	1522.4	1545.0	49.0	3.2	2.1		0
	2800	OTTA	240	R	1620.0	1640.0	20.0	2.2	1.1		
	2800	OTTA	21	GRF	1720.0	1810.0	140.0	9.8	4.4		
	2800	OTTA	8	S	1726.3	1726.5	.7	.4			
	930	BORD	41	F	1726.5	1726.6	.6	61.0	1.0		
	9400	HUAN	20	GRF	1744.5	1812.3	75.7	7.9	4.4		0
	2800	OTTA	20	GRF	1950.0	2005.0	70.0	2.8	1.4		
	208	VORO	4	S/F	2144.0	2146.0	3.0	200.0D			
	9400	TYKW	5	S	2231.5	2232.0	1.5	10.0	1.5		
	9400	TYKW	5	S	2237.5	2237.7	5.0	3.0	1.5		
02	260	ONDR	44	NS	0555.0E	0724.0U	205.0D	10.0			
	260	ONDR	43	NS	1055.0	1306.0U	192.0D	13.0U			
	245	LEAR	43	NS	2314.0	0807.8	615.0D	24.0			QL=6 ST=2 TYP=1
	500	HIRA	45	C	0005.2	0005.6	1.0	8.0	3.0		0
	9400	TYKW	21	GRF	0038.0	0053.3	55.0	10.0	5.0		
	9400	TYKW	45	C	0058.0	0100.0	6.0	5.0	1.5		
	2000	TYKW	21	GRF	0058.0	0135.0	80.0	2.0	1.0		
	2000	TYKW	5	S	0058.5	0059.3	2.0	2.0	.5		
	3750	TYKW	45	C	0058.7	0059.1	6.0	3.0	1.0		
	9400	TYKW	5	S	0112.3	0112.7	1.0	4.0	1.5		
	3750	TYKW	21	GRF	0324.0	0340.0	46.0	2.0	1.0		
	9400	TYKW	21	GRF	0330.0	0352.0	55.0	6.0	3.0		
	9400	TYKW	5	S	0341.6	0342.0	1.0	3.0	1.0		
	2000	TYKW	32	ABS	0400.0	0440.0	100.0	-2.0	-1.0		
	100	HIRA	48	C	0403.0		33.0	10000.0D	1860.0D		
	3750	TYKW	31	ABS	0410.0	0440.0	80.0	-3.0	-1.5		
	9400	TYKW	21	GRF	0515.0	0624.0	170.0	6.0	3.0		

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JUNE 1982

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
02	3750	TYKW	20	GRF	0535.0	0552.0	60.0	2.0	1.0		
	2000	TYKW	21	GRF	0640.0	0704.0	140.0	8.0	3.0		
	3750	TYKW	20	GRF	0645.0	0710.0	80.0	7.0	3.0		
	2950	GORK	20	GRF	0645.0	0706.2	228.0	8.6	3.5		
	650	GORK	20	GRF	0648.0	0941.1	228.6	4.5			
	1000	TYKW	20	GRF	0650.0	0708.0	100.0	3.0	1.5		
	536	ONDR	40	F	0652.8	0658.3	6.4	8.0			
	9400	TYKW	21	GRF	0656.0	0707.0	40.0	6.0	3.0		
	2840	PEKG	20	GRF	0656.0	0710.8	79.0D	9.6			
	3100	CRIM	20	GRF	0657.0	0712.0	45.0	7.0	2.0		
	9100	GORK	22	GRF	0657.0	1049.1	412.1U	11.0			
	204	IZMI	4	S/F	0710.5	0710.6	1.5	60.0			
	9400	TYKW	5	S	0711.0	0711.9	5.0	6.0	1.5		
	2650	DWIN	8	S	0719.0	0719.0	1.0	90.0	30.0		
	2650	DWIN	8	S	0720.0	0721.0	1.0	80.0	30.0		
	430	KRAK	41	F	0732.1	0732.2	3.6	23.0			
	2650	DWIN	1	S	0742.0	0743.0	1.0	10.0	5.0		
	3750	TYKW	20	GRF	0805.0	0820.0	50.0	2.0	1.0		
	2000	TYKW	20	GRF	0808.0	0817.0	45.0	3.0	1.5		
	3100	CRIM	20	GRF	0809.0	0819.0	96.0	4.0	1.0		
	15000	KISV	2	S/F	0902.5	0903.5U	35.0U	39.0			
	260	ONDR	40	F	0934.0	0936.4	8.7	8.0			
	127	TORN	8	S	0940.7	0941.3	.8	230.0	120.0		
	127	TORN	4	S/F	0945.4	0946.5	2.0	19000.0	9600.0		
	430	KRAK	8	S	0945.8	0946.0	.9	37.0			
	204	IZMI	45	C	0945.8	0946.5	1.3	900.0	300.0		
	260	ONDR	2	S/F	0946.0	0946.7	1.8	128.0			
	33	UPIC	4	S/F	0946.4	0946.7	1.6				
	33	UPIC	4	S/F	0946.4	0946.7	1.8				
	29	UPIC	4	S/F	0946.4	0946.7	1.6				
	6100	KISV	2	S/F	1045.6	1049.1	4.5	8.0U			
	2950	GORK			1142.0	1204.3		125.0			
	9400	HUAN	2	S/F	1211.2	1213.5	6.4	8.7	3.5		0
	536	ONDR	8	S	1221.4	1221.5	.1	8.0			
	260	ONDR	2	S/F	1255.7	1257.9	4.2	46.0	11.0		
	536	ONDR	7	C	1257.2	1258.6	1.8	9.0	7.0		
	536	ONDR	8	S	1304.2	1305.4	1.2U	15.0			
	930	BORD	41	F	1304.8	1305.2	.6	35.0	2.0		
	260	ONDR	7	C	1304.8	1305.6	4.8	29.0			
	33	UPIC	4	S/F	1305.0	1305.5	1.6				
	29	UPIC	4	S/F	1305.0	1305.9	1.7				
	930	BORD	8	S	1326.3	1326.3	.1	18.0	1.0		
	9400	HUAN	22	GRF	1333.5	1356.6	41.2	7.0	4.0		0
	9400	HUAN	20	GRF	1506.2	1513.5	13.6	5.2	3.7		0
	33	UPIC	46	C	1537.2	1542.6	17.5				
	29	UPIC	45	C	1538.1	1539.6	7.8				
	2800	OTTA	28	PRE	1540.0		3.5	2.6	1.8		
	2650	DWIN	45	C	1540.0	1546.0	15.0	195.0	90.0		
	9400	HUAN	3	S	1542.2	1544.7	5.8	281.3	151.8		R
	2800	OTTA	3	S	1543.5	1546.0	11.5	251.0	58.0		
	9400	HUAN	29	PBI	1548.0	1548.0	41.2	71.6	27.1		R
	2800	OTTA	30	PBI	1555.0	1555.0	40.0	9.4	2.4		
	2800	OTTA	1	S	1625.0	1626.0	3.0	1.6	1.1		
	2800	OTTA	1	S	1643.2	1643.6	1.0	4.8	2.4		
	9400	HUAN	20	GRF	1758.8	1820.7	32.7	7.0	2.4		0
	9400	HUAN	21	GRF	1844.0	1902.7	39.9	12.2	4.0		R
	2800	OTTA	1	S	1853.8	1854.0	2.5	1.6	1.0		
	9400	HUAN	3	S	1858.8	1859.4	3.3	99.6	36.7		R
	2800	OTTA	1	S	1859.0	1859.3	4.0	2.4	1.2		
	9400	HUAN	2	S/F	2003.0	2006.5	4.0	10.5	3.8		R
	2695	PENT	1	S	2005.5	2006.5	4.0	2.4	2.0		
	1000	TYKW	8	S	2108.2	2108.3	.3	14.0	3.0		
	1000	TYKW	45	C	2129.0	2130.8	3.0	9.0	3.0		
	200	HIRA	46	C	2129.6	2130.6	2.0	72.0	6.0		0
	9400	HUAN	1	S	2141.6	2143.2	4.2	8.7	2.9		0
	200	HIRA	46	C	2215.0	2215.3	1.4	74.0	12.0		WL
	3750	TYKW	21	GRF	2233.0	2328.0	110.0	5.0	2.5		
	2000	TYKW	21	GRF	2240.0	2330.0	100.0	2.0	1.0		
	2000	TYKW	45	C	2253.5	2255.8	7.5	130.0	20.0		
	3750	TYKW	5	S	2254.0	2256.0	6.0	88.0	20.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
02	9400	TYKW	5	S	2254.5	2255.9	6.5	175.0	30.0		RAIN
	2800	OTTA	4	S/F	2255.0	2256.0	10.0	87.0	16.4		
	2695	MANI	3	S	2255.1	2256.5	4.9	78.4	26.1		
	4995	MANI	3	S	2255.6	2256.5	2.9	45.1	15.0		
	8800	MANI	3	S	2255.6	2256.5	1.6	70.1	23.4		
	9400	TYKW	29	PBI	2301.0		55.0U	8.0	4.0U		
	3750	TYKW	29	PBI	2301.0		10.0	3.0	1.0		
03	33	UPIC	43	NS	0404.0		513.3				
	29	UPIC	43	NS	0404.7		515.1				
	260	ONDR	44	NS	0618.0E	0834.0U	160.0D	182.0U			
	260	ONDR	43	NS	1142.0		142.0D				
	410	SGMR	43	NS	1321.6	1304.0	143.7	86.0			QL=6 ST=2 TYP=1
	245	SGMR	43	NS	1321.6	1358.0	113.7	50.0			QL=6 ST=2 TYP=1
	610	SGMR	43	NS	1321.6	1410.3	131.4	40.0			QL=6 ST=2 TYP=1
	9400	TYKW	5	S	0000.5	0001.0	1.5	7.0	2.0		
	3750	TYKW	21	GRF	0035.0	0100.0	100.0	2.0	1.0		
	9400	TYKW	21	GRF	0035.0	0120.0	120.0U	12.0	6.0U		RAIN
	3750	TYKW	5	S	0113.5	0114.3	2.5	1.5	.5		
	500	HIRA	45	C	0211.3	0211.9	1.0	6.0	2.0		0
	1000	TYKW	5	S	0212.0	0212.1	1.0	1.0	.3		
	9400	TYKW	5	S	0217.0	0217.6	2.0U	6.0	2.0U		
	200	HIRA	46	C	0234.0	0238.8	8.6	100.0	3.0		0
	100	HIRA	48	C	0234.6	0238.1	6.0	10000.0	4000.0		WL
	9395	PEKG	45	C	0316.0	0327.6	23.0	86.0	7.7		
	9395	PEKG			0316.0	0333.9		16.4			
	9400	TYKW	5	S	0320.0	0320.4	2.0	4.0	1.5		
	3750	TYKW	21	GRF	0320.0	0400.0	80.0	2.0	1.0		
	9100	GORK	23	GRF	0320.0		225.0D				
	950	GORK	21	GRF	0322.0	0325.6	24.6	6.8			
	9400	TYKW	28	PRE	0323.0	0325.0	3.5	5.0	3.0		
	2950	GORK	23	GRF	0323.5	0333.8	226.0	4.2			
	2840	PEKG	41	F	0326.0	0333.8	26.0	8.5	3.9		
	9400	TYKW	45	C	0326.5	0327.6	3.5	103.0	18.0		RAIN
	9100	GORK	4	S/F	0326.6	0327.5	2.3	80.0			
	4995	MANI	3	S	0326.7	0327.7	3.5	19.1	6.4		
	3750	TYKW	5	S	0327.3	0327.7	2.5	4.0	1.5		
	8800	MANI	3	S	0327.5	0327.7	1.5	90.4	30.1		
	650	GORK	21	GRF	0328.1	0336.0	11.9	3.0			
	9400	TYKW	30	PBI	0330.0		30.0	9.0	4.0U		INTERFERENCE
	1000	TYKW	45	C	0333.0	0333.4	2.0	17.0	6.0		
	9400	TYKW	45	C	0333.0	0333.8	9.0	16.0	5.0		
	3750	TYKW	45	C	0333.0	0334.0	10.0	4.0	2.0		
	2000	TYKW	45	C	0333.0	0337.8	8.0	6.0	1.0		
	950	GORK	2	S/F	0333.0	0333.4	1.5	15.0			
	650	GORK	1	S	0333.0	0333.4	1.1	6.0			
	9100	GORK	1	S	0333.1	0333.8	2.9	12.0			
	1000	TYKW	45	C	0336.5	0338.4	3.5	17.0	4.0		
	650	GORK	2	S/F	0337.3	0338.2	1.3	4.0			
	950	GORK	2	S/F	0337.6	0338.4	1.8	11.0			
	33	UPIC	48	C	0404.0	0405.5	23.7				
	29	UPIC	48	C	0404.7	0405.9	23.0				
	200	HIRA	46	C	0412.6	0418.0	15.3	270.0	12.0		0
	9400	TYKW	28	PRE	0445.0	0448.5	3.5	6.0	3.0		
	3750	TYKW	5	S	0447.0	0449.6	6.0	18.0	7.0		
	9395	PEKG	45	C	0447.0	0449.8	5.0	138.0	47.8		
	650	GORK	22	GRF	0447.1	0450.9	10.3	4.0			
	2840	PEKG	3	S	0448.0	0449.7	4.0	11.2	4.8		
	9400	TYKW	45	C	0448.5	0449.7	6.5	156.0	42.0		
	9100	GORK	4	S/F	0448.7	0449.7	4.1	140.0			
	4995	MANI	3	S	0448.8	0449.8	3.5	78.9	26.3		
	8800	MANI	3	S	0448.8	0449.8	3.2	180.8	60.3		
	950	GORK	1	S	0448.9	0450.7	4.8	4.0			
	2000	TYKW	5	S	0449.0	0450.0	4.0	5.0	2.0		
	1000	TYKW	45	C	0449.0	0450.7	4.0	4.5	1.5		
	1415	MANI	1	S	0449.0	0450.7	2.5	3.5	1.2		
	2695	MANI	1	S	0449.0	0450.7	2.5	6.2	2.1		
	2950	GORK		S	0449.1	0450.0	2.8	7.3			
	650	GORK	2	S/F	0450.4	0450.9	.9	12.0	6.0		
	500	HIRA	45	C	0450.4	0451.0	1.0	20.0	10.0		0

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
03	606	MANI	3	S	0450.5	0451.0	1.0	11.6	3.9		
	9395	PEKG	29	PBI	0452.0		28.0D	18.7			
	3750	TYKW	29	PBI	0453.0		15.0	2.0	1.0		
	9400	TYKW	30	PBI	0455.0		55.0	6.0	3.0		
	9400	TYKW	5	S	0529.0	0538.6	20.0	7.0	3.0		
	2840	PEKG	41	F	0551.0	0552.0	27.0	4.4	2.0		
	2840	PEKG			0551.0	0606.0		3.8			
	2840	PEKG			0551.0	0614.0		3.5			
	9400	TYKW	5	S	0557.0	0559.3	4.0	10.0	6.0		
	15000	KISV	2	S/F	0557.6	0559.3	5.0	22.0			
	6100	KISV	2	S/F	0558.8	0559.3	3.0	4.0			
	9400	TYKW	29	PBI	0601.0		15.0U	4.0	2.0U		RAIN
	650	GORK	23	GRF	0606.4	0610.7	9.3	4.0			
	650	GORK	1	S	0609.1	0609.3	.7	7.5	3.5		
	3750	TYKW	21	GRF	0709.0	0727.0	70.0	1.5	.7		
	2840	PEKG	1	S	0709.0	0711.0	4.0	3.0	1.4		
	2000	TYKW	45	C	0710.0	0711.3	4.0	1.5	.5		
	3750	TYKW	5	S	0710.0	0711.3	4.0	3.0	1.0		
	9400	TYKW	45	C	0710.0	0715.2	12.0U	14.0U	4.0U		INTERFERENCE
	9395	PEKG	45	C	0710.0	0711.0	8.0	7.6	3.4		
	9395	PEKG			0710.0	0715.1		12.7			
	6100	KISV	1	S	0710.1	0711.1	2.0	4.0			
	6100	KISV	1	S	0714.1	0715.1	2.5	4.0			
	15000	KISV	1	S	0714.6	0715.7	2.0	12.0			
	9400	TYKW	20	GRF	0724.0	0740.0	50.0	6.0	3.0		
	2950	GORK		GRF	0738.0		300.0D				
	9100	GORK	23	GRF	0739.0E		290.0D				
	9400	TYKW	5	S	0818.0	0820.9	6.0	12.0	4.0		
	204	IZMI	41	F	0822.0	0842.2	20.8	530.0			
	3750	TYKW	45	C	0829.0	0837.6	17.0	105.0	15.0		
	9400	TYKW	45	C	0829.0	0839.3	20.0	290.0	50.0		RAIN
	9395	PEKG	46	C	0829.0	0837.4	25.0	178.0	40.7		
	9395	PEKG			0829.0	0839.5		225.0			
	15000	KISV			0829.6	0834.0		113.0			
	15000	KISV	46	C	0829.6	0837.5	14.0	172.0			
	15000	KISV			0829.6	0839.5		171.0			
	6100	KISV			0829.7	0834.0		42.0			
	6100	KISV			0829.7	0837.7		121.0			
	6100	KISV	46	C	0829.7	0839.6	12.0	134.0			
	9100	GORK	46	C	0830.0	0832.5	5.7	40.0			
	9100	GORK			0830.0	0833.9		70.0			
	2840	PEKG	45	C	0830.0	0834.0	17.0	7.0	3.5		
	2840	PEKG			0830.0	0837.8		90.8			
	2695	MANI	46	C	0830.0	0837.8	11.5	77.4	25.8		
	4995	MANI	46	C	0830.0	0839.5	15.0	162.5	54.2		
	8800	MANI	46	C	0830.0	0839.5	15.0	343.2	114.4		
	2650	DWIN	4	S/F	0831.0	0838.0	10.0	60.0	30.0		
	8800	LEAR	47	GB	0831.5	0833.8	10.8	79.0			QL=6 ST=3 TYP=5
	4995	LEAR	47	GB	0831.5	0833.8	10.1	36.0			QL=6 ST=3 TYP=5
	15400	LEAR	47	GB	0831.6	0833.8	10.0	100.0			QL=6 ST=3 TYP=5
	2950	GORK	3	S	0831.9	0833.6	4.0	17.0			
	2000	TYKW	45	C	0832.0	0837.3	11.0	65.0	12.0		
	3100	CRIM	45	C	0832.0	0834.5	17.0	24.0	8.0		
	3000	IZMI	7	C	0832.0	0838.0	10.0	65.0	30.0		
	3100	CRIM			0832.0	0838.2		77.0			
	8400	BERN	45	C	0832.0	0839.5	28.0	300.0			
	19600	BERN	45	C	0832.0	0856.1	28.0	148.0			
	2695	LEAR	47	GB	0832.3	0833.5	8.8	20.0			QL=6 ST=3 TYP=5
	1000	TYKW	45	C	0833.0	0833.1	3.0	19.0	2.5		
	950	GORK	46	C	0833.0	0837.7	9.5	195.0D			
	200	HIRA	46	C	0833.0	0838.0	28.0	630.0	20.0		0
	950	GORK			0833.0	0838.2U		195.0D			
	930	BORD	46	C	0833.0	0838.4	10.0	3648.0	10.0		
	200	HIRA			0833.0	0841.0		410.0			0
	245	LEAR	47	GB	0833.1	0833.3	8.2	380.0			QL=6 ST=3 TYP=5
	430	KRAK	45	C	0833.1	0838.2	8.1	320.0	15.0		
	650	GORK	23	GRF	0834.2U	0841.9	15.3D	3.0			
	1415	MANI	47	GB	0836.0	0837.8	5.0	707.5	235.8		
	1000	TYKW	47	GB	0836.5	0837.8	3.5	3070.0	350.0		
	500	HIRA	45	C	0836.6	0837.3	2.0	500.0	150.0		SL

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
03	9100	GORK	46	C	0836.6	0837.6	6.8	190.0			
	1415	LEAR	47	GB	0836.6	0837.6	2.4	100.0			QL=6 ST=2 TYP=5
	9100	GORK			0836.6	0839.5		213.0			
	808	ONDR	2	S/F	0836.7	0837.2	3.2				
	2950	GORK	45	C	0836.7	0837.8	3.9	61.0			
	2950	GORK			0836.7	0839.5		21.0			
	127	TORN	42	SER	0836.8		12.0				DISTURBED
	606	MANI	47	GB	0837.0	0837.8	2.0	778.7	259.6		
	650	GORK	4	S/F	0837.0	0838.0U	2.2	75.0D			
	410	LEAR	47	GB	0837.1	0837.6	.9	160.0			QL=6 ST=2 TYP=5
	610	LEAR	49	GB	0837.1	0838.0	1.7	880.0			QL=6 ST=2 TYP=6
	810	KRAK			0837.2	0838.0U		1000.0D			
	536	ONDR	45	C	0837.3	0838.2	2.8	208.0	200.0U		
	100	HIRA	42	SER	0837.4	0838.4	5.0	470.0			WL
	204	IZMI	46	C	0838.0	0842.2	6.0		100.0		
	6100	KISV	29	PBI	0841.7	0842.0	30.0	21.0			
	2000	TYKW	29	PBI	0843.0		10.0	3.0	1.5		
	6100	KISV	2	S/F	0843.8	0844.4	1.5	10.0			
	3750	TYKW	29	PBI	0846.0		20.0	7.0	3.0		
	100	HIRA	46	C	0846.7	0848.0	10.0	1500.0	140.0		WL
	8800	LEAR	8	S	0848.1	0848.3	.2	11.0			QL=6 ST=2 TYP=3
	15400	LEAR	8	S	0848.1	0848.6	.7	18.0			QL=6 ST=2 TYP=3
	9400	TYKW	30	PBI	0849.0		25.0D	20.0	15.0D		
	15400	LEAR	8	S	0852.8	0853.1	.5	20.0			QL=6 ST=2 TYP=3
	15000	KISV	4	S/F	0855.0	0856.1	5.0	88.0			
	6100	KISV	2	S/F	0855.1	0856.1	2.5	9.0			
	9400	TYKW	5	S	0855.5	0856.1	2.5	40.0	10.0		
	9100	GORK	1	S	0855.7	0856.1	1.3	26.0			
	15400	LEAR	47	GB	0855.8	0856.1	.8	68.0			QL=6 ST=2 TYP=5
	950	GORK	20	GRF	0935.1	1011.0	120.0	6.5			
	930	BORD	8	S	1055.0	1055.0	.1	27.0	1.0		
	808	ONDR	49	GB	1112.3		26.0				
	6100	KISV	28	PRE	1125.0	1126.2	3.0	13.0			
	15000	KISV	28	PRE	1125.5	1126.0	1.0	14.0			
	9100	GORK	1	S	1125.5	1126.1	2.0	27.0			
	8800	SGMR	4	S/F	1125.6	1126.0	2.9	32.0			QL=6 ST=2 TYP=3
	15400	SGMR	8	S	1125.6	1126.1	1.4	20.0			QL=6 ST=2 TYP=3
	4995	SGMR	8	S	1125.8	1126.1	2.0	17.0			QL=6 ST=2 TYP=3
	260	ONDR	8	S	1131.9	1132.0	.3	5.0			
	6100	KISV	47	GB	1140.5	1143.4	8.5	1350.0			
	6100	KISV			1140.5	1144.8		980.0			
	950	GORK	23	GRF	1140.6	1209.0	57.0	16.5			
	9100	GORK	47	GB	1140.7	1143.3	27.2	7660.0			
	9100	GORK		GB	1140.7	1204.2		555.0			
	15000	KISV	47	GB	1141.0		8.5	2560.0D			
	2650	DWIN	49	GB	1141.0		30.0	530.0D			
	4995	SGMR	49	GB	1141.0	1143.3	30.6	4000.0			QL=6 ST=2 TYP=7
	2800	OTTA	47	GB	1141.0	1143.5	29.0	2245.0	239.0		
	3100	CRIM	47	GB	1141.0	1144.6	35.0	1590.0	530.0		
	3100	CRIM			1141.0	1204.2		154.0			
	8800	SGMR	49	GB	1141.1	1143.3	30.4	6000.0			QL=6 ST=2 TYP=7
	245	SGMR	49	GB	1141.1	1143.3	26.0	98000.0			QL=6 ST=2 TYP=7
	29	UPIC	49	GB	1141.5		31.1				
	15400	SGMR	49	GB	1141.6	1143.3	29.2	13000.0			QL=6 ST=2 TYP=7
	3000	IZMI	45	C	1141.7	1143.0	14.0	1207.0	460.0		
	430	KRAK	49	GB	1142.0	1142.0U	40.8	600.0D	104.0		
	204	IZMI	47	GB	1142.0	1143.0	25.0	33000.0	4000.0		
	2950	GORK	46	C	1142.0	1143.1	26.6	160.0			
	2695	SGMR	49	GB	1142.0	1143.3	27.3	2699.0			QL=6 ST=2 TYP=7
	19600	BERN	47	GB	1142.0	1143.5	36.0	7100.0			
	35000	BERN	47	GB	1142.0	1143.5	36.0	42000.0			
	2950	GORK			1142.0	1144.9		230.0			
	650	GORK	47	GB	1142.0	1145.0U	25.0	3600.0D			
	8400	BERN	47	GB	1142.0	1145.8U	36.0	3790.0D			
	536	ONDR	49	GB	1142.0	1146.0U	33.5				
	2950	GORK			1142.0	1202.5		88.0			
	650	GORK			1142.0	1204.6		1850.0			
	430	KRAK			1142.0	1205.0U		600.0D			
	610	SGMR	49	GB	1142.1	1143.5	37.5	9200.0			QL=6 ST=2 TYP=7
	810	KRAK			1142.1	1204.7					

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
03	810	KRAK	49	GB	1142.1	1226.8U	44.8	1000.0D	36.0		
	950	GORK	47	GB	1142.2	1144.5U	2.6	8130.0D			
	950	GORK			1142.2	1146.5		7840.0			
	950	GORK			1142.2	1204.9		375.0			
	410	SGMR	49	GB	1142.3	1143.1	31.0	38999.0			QL=6 ST=2 TYP=7
	1415	SGMR	49	GB	1142.3	1145.0	28.7	20000.0			QL=6 ST=2 TYP=7
	33	UPIC	49	GB	1142.4		30.1				
	92500	BERN	3	S	1143.0	1143.5	1.0	150.0D			
	6100	KISV	29	PBI	1148.5	1148.5	30.0	110.0			
	15000	KISV	4	S/F	1148.7	1152.0	7.0	58.0			
	15000	KISV	29	PBI	1149.5	1149.5	30.0	50.0			
	15000	KISV	2	S/F	1156.5	1157.8	2.5	39.0			
	6100	KISV			1159.2	1202.4		270.0			
	6100	KISV	45	C	1159.2	1204.2	11.0	30.0			
	15000	KISV			1159.4	1202.4		360.0			
	15000	KISV	45	C	1159.4	1204.2	10.5	412.0			
	3000	IZMI	7	C	1200.0	1204.8	13.0	68.0	50.0		
	650	GORK	29	PBI	1207.0	1207.0	32.0D	18.0			
	2800	OTTA	29	PBI	1210.0	1210.0	15.0	10.6	2.7		
	33	UPIC	29	PBI	1212.5	1218.0	24.8				
	29	UPIC	29	PBI	1212.6	1218.0	27.2				
	808	ONDR	42	SER	1220.5	1227.0	10.0D	15.0			
	430	KRAK	45	C	1246.3E	1256.8	14.0D	280.0	48.0		
	536	ONDR	42	SER	1249.0	1410.0U	81.0D	37.0U			
	930	BORD	46	C	1258.0E	1258.0E	6.0D	80.0U	26.0		
	410	SGMR	47	GB	1306.6	1306.6	15.0	100.0			QL=6 ST=2 TYP=5
	245	SGMR	20	GRF	1306.6	1308.1	15.0	32.0			QL=6 ST=2 TYP=2
	610	SGMR	20	GRF	1309.6	1309.8	12.0	20.0			QL=6 ST=2 TYP=2
	930	BORD	46	C	1323.7	1328.6	9.3	44.0	5.0		
	930	BORD	41	F	1405.0	1411.4	7.0	27.0	3.0		
	9400	HUAN	21	GRF	1424.0	1436.5	20.2	5.2	3.2		0
	9400	HUAN	1	S	1427.6	1428.5	2.1	8.7	3.5		0
	2800	OTTA	21	GRF	1500.0	1518.0	50.0	2.6			
	9400	HUAN	4	S/F	1505.0	1509.6	8.8	113.6	53.1		R
	930	BORD	46	C	1505.0	1512.0	11.0	143.0	75.0		
	8400	BERN	4	S/F	1505.5	1509.8	7.0D	159.0			
	2800	OTTA	4	S/F	1505.5	1510.0	11.0	45.0	16.4		
	4995	SGMR	47	GB	1505.8	1508.6	12.0	77.0			QL=6 ST=3 TYP=5
	1415	SGMR	47	GB	1506.0	1507.8	7.5	38.0			QL=6 ST=3 TYP=5
	2650	DWIN	2	S/F	1506.0	1510.0	8.0	30.0	15.0		
	610	SGMR	49	GB	1506.1	1506.6	8.5	180.0			QL=6 ST=3 TYP=6
	410	SGMR	49	GB	1506.3	1508.6	10.8	189.0			QL=6 ST=3 TYP=6
	2695	SGMR	47	GB	1506.3	1508.6	6.8	39.0			QL=6 ST=3 TYP=5
	19600	BERN	4	S/F	1507.0	1509.8	7.0D	32.0			
	8800	SGMR	47	GB	1507.1	1508.6	6.4	56.0			QL=6 ST=3 TYP=5
	15400	SGMR	47	GB	1508.0	1508.6	4.5	57.0			QL=6 ST=3 TYP=5
	9400	HUAN	29	PBI	1513.8	1513.8	26.1	22.7	10.8		R
	2800	OTTA	1	S	1532.0	1538.5	9.0	4.6	2.3		
	9400	HUAN	21	GRF	1708.1	1739.4	53.3	11.4	3.5		0
	9400	HUAN	2	S/F	1735.0	1736.3	2.5	10.5	6.6		0
	245	SGMR	47	GB	1804.3	1804.8	.5	110.0			QL=6 ST=2 TYP=5
	2800	OTTA	240	R	1820.0	1955.0	95.0	12.0	6.0		
	410	SGMR	47	GB	1820.1	1820.8	1.2	100.0			QL=6 ST=2 TYP=5
	9400	HUAN	21	GRF	1848.4	1908.5	36.6	12.2	7.0		R
	9400	HUAN	3	S	1854.4	1856.0	2.4	21.0	8.7		R
	8800	PALE	8	S	1855.1	1855.6	1.0	22.0			QL=6 ST=2 TYP=3
	15400	PALE	8	S	1855.1	1855.6	1.0	46.0			QL=6 ST=2 TYP=3
	4995	PALE	8	S	1855.5	1855.6	.3	21.0			QL=6 ST=2 TYP=3
	4995	SGMR	8	S	1855.5	1855.6	.3	20.0			QL=6 ST=2 TYP=3
	9400	HUAN	1	S	1918.0E	1919.3	1.6D	14.0	6.1		0
	8800	PALE	47	GB	1919.0	1921.1	2.1	58.0			QL=6 ST=2 TYP=5
	15400	PALE	8	S	1919.6	1919.8	.2	20.0			QL=6 ST=2 TYP=3
	4995	SGMR	8	S	1927.8	1928.3	.5	13.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	1928.1	1929.8	1.7	20.0			QL=6 ST=2 TYP=3
	9400	HUAN	20	GRF	1954.5	2003.2	21.2	8.7	2.6		0
	2800	OTTA	20	GRF	2000.0	2030.0	100.0	4.0	2.0		
	8800	SGMR	8	S	2002.1	2002.6	.5	21.0			QL=6 ST=2 TYP=3
	410	PALE	47	GB	2048.0	2048.1	.3	180.0			QL=6 ST=2 TYP=5
	9400	TYKW	45	C	2101.0	2101.8	2.0	24.0	6.0		
	8800	PALE	8	S	2101.3	2101.8	.8	36.0			QL=6 ST=2 TYP=3

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
03	9400	TYKW	29	PBI	2103.0		10.0	8.0	3.0		
	245	SGMR	4	S/F	2122.8	2123.6	6.0	590.0			QL=6 ST=2 TYP=3
	9400	HUAN	3	S	2127.1	2128.5	4.2	82.1	20.7		0
	9400	TYKW	5	S	2127.5	2128.5	2.5	90.0	28.0		
	3750	TYKW	5	S	2128.0	2128.6	5.0	3.0	1.0U		
	8800	PALE	47	GB	2128.1	2128.5	1.2	100.0			QL=6 ST=2 TYP=5
	15400	PALE	47	GB	2128.1	2128.5	1.5	290.0			QL=6 ST=2 TYP=5
	15400	SGMR	47	GB	2128.1	2128.6	1.4	260.0			QL=6 ST=2 TYP=5
	17000	NOBE	3	S	2128.2	2128.6	1.5	263.0D			R
	8800	SGMR	47	GB	2128.3	2128.5	.8	58.0			QL=6 ST=2 TYP=5
	9400	TYKW	29	PBI	2130.0		5.0	7.0	3.0		
	9400	HUAN	2	S/F	2139.8	2140.7	2.2	7.0	2.6		0
	9400	TYKW	21	GRF	2142.0	2150.0	35.0	5.0	2.0		
	9400	HUAN	1	S	2153.6	2154.6	2.6	12.2	5.2		0
	9400	TYKW	45	C	2153.7	2154.3	4.5	9.0	3.0		
	9395	PEKG	21	GRF	2226.0	2231.0	60.0	12.1	10.7		
	2695	PENT	240	R	2235.0	2300.0	25.0	3.0	1.5		
	3750	TYKW	21	GRF	2240.0	0245.0	600.0	16.0	8.0		
	9400	TYKW	28	PRE	2249.0	2250.0	31.0	7.0	2.0		
	2840	PEKG	3	S	2250.0	2355.9	65.9U	232.0	25.8		
	3750	TYKW	5	S	2250.4	2250.8	1.0	2.0	.7		
	9395	PEKG	45	C	2252.0	2353.9	61.9U	179.0			
	9395	PEKG			2252.0	2355.8		51.1	16.7		
	3750	TYKW	5	S	2254.0	2301.0	16.0	1.5	.7		
	2930	VORO	3	S	2255.0	2257.0	5.0	130.0			
	2840	PEKG	29	PBI	2302.0		17.0	10.2	4.3		
	9400	TYKW	5	S	2320.0	2328.2	10.0	12.0	7.0		
	3750	TYKW	21	GRF	2323.0	2328.0	45.0	3.0	1.0		
	9400	TYKW	30	PBI	2330.0		135.0	8.0	4.0		
	35000	NAGO	45	C	2340.0	0024.0	300.0	52.0			
	35000	NAGO			2340.0	0031.0		170.0			
	35000	NAGO			2340.0	0258.0		65.0			
	9400	TYKW	45	C	2341.0	2347.2	23.0	9.0	4.0		
	3750	TYKW	5	S	2341.0	2353.0	25.0	2.0	1.0		
04	29	UPIC	43	NS	0540.5		722.3				
	33	UPIC	43	NS	0540.6		723.3				
	2000	TYKW	21	GRF	0010.0	0244.0	510.0	7.0	4.0		
	2695	PENT	21	GRF	0010.0	0110.0	100.0D	13.8			
	9400	TYKW	45	C	0010.5	0031.6	26.5	200.0	30.0		
	2695	PENT	45	C	0011.0	0016.9	7.0	8.2	3.0		
	17000	NOBE	28	PRE	0012.6	0023.0	10.4	28.0			0
	2000	TYKW	42	SER	0013.0	0023.2	24.0	260.0	24.0		
	2000	TYKW			0013.0	0024.3		250.0			
	3750	TYKW	45	C	0013.0	0031.6	25.0	62.0	12.0		
	2695	PENT	40	F	0014.0	0032.0	24.0	148.0			
	1000	TYKW	21	GRF	0020.0	0115.0	160.0	1.5	.7		
	1000	TYKW	5	S	0021.0	0021.5	1.0	2.0	.5		
	17000	NOBE	7	C	0023.0	0029.6	6.6	319.0			0
	9395	PEKG	45	C	0028.0	0031.6	7.0	161.0			
	1000	TYKW	45	C	0029.0	0031.9	5.0	38.0	2.5		
	4995	MANI	4	S/F	0029.0	0032.2	5.0	119.5	39.8		
	8800	MANI	4	S/F	0029.3	0032.2	4.7	266.9	88.9		
	2695	MANI	4	S/F	0029.5	0033.0	4.9	201.5	67.2		
	17000	NOBE	29	PBI	0029.6	0033.2	30.0	28.0			0
	1415	MANI	4	S/F	0030.5	0031.5	3.5	49.6	16.5		
	1000	TYKW	29	PBI	0034.0		15.0	1.5	.7		
	9400	TYKW	30	PBI	0037.0		65.0	16.0	8.0		
	2000	TYKW	30	PBI	0037.0		70.0	6.0	3.0		
	3750	TYKW	30	PBI	0038.0		65.0	9.0	4.0		
	9400	TYKW	5	S	0047.0	0049.0	7.0	3.0	1.0		
	3750	TYKW	45	C	0100.0	0108.0	10.0	10.0	4.0		
	2000	TYKW	28	PRE	0101.0	0102.1	5.0	3.0	1.0		
	1000	TYKW	5	S	0101.0	0102.2	2.0	4.5	1.0		
	2840	PEKG	41	F	0101.0	0102.1	23.0	7.4	4.1		
	2840	PEKG			0101.0	0107.9		15.7			
	9400	TYKW	20	GRF	0105.0	0115.0	35.0	7.0	3.0		
	1000	TYKW	45	C	0106.0	0107.0	5.0	17.0	3.0		
	2000	TYKW	5	S	0106.0	0107.6	4.0	11.0	6.0		
	2695	PENT	1	S	0106.0	0108.0	9.0	9.2	4.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
04	2000	TYKW	29	PBI	0110.0		20.0	3.0	1.5		
	3750	TYKW	29	PBI	0110.0		30.0	6.0	3.0		
	9400	TYKW	21	GRF	0150.0	0244.0	110.0	11.0	6.0		
	9400	TYKW	5	S	0151.0	0151.7	5.0	4.0	1.5		
	9400	TYKW	20	GRF	0205.0	0216.0	30.0	12.0	5.0		
	3750	TYKW	20	GRF	0208.0	0216.0	30.0	3.0	1.5		
	2000	TYKW	45	C	0210.0	0213.6	8.0	5.0	2.0		
	2000	TYKW	29	PBI	0218.0		20.0	1.0	.5		
	9400	TYKW	28	PRE	0251.0	0257.0	6.0	7.0	4.0		
	3750	TYKW	20	GRF	0252.0	0305.0U	45.0	4.0	2.0D		
	9100	GORK	21	GRF	0256.0E	0518.4	544.0D	72.0			
	9400	TYKW	5	S	0257.0	0258.5	6.0	189.0	55.0		
	9100	GORK	4	S/F	0257.0	0258.5	5.3	156.0			
	4995	MANI	3	S	0257.0	0259.0	4.0	26.0	8.7		
	8800	MANI	3	S	0257.0	0259.0	5.0	175.2	58.4		
	17000	NOBE	7	C	0257.1	0258.5	3.2	265.0			0
	2950	GORK	21	GRF	0258.0E	0302.0	540.0D	27.0			
	17000	NOBE	29	PBI	0300.3	0300.3	20.0	46.0			0
	9400	TYKW	29	PBI	0303.0		31.0	25.0	12.0		
	1000	TYKW	21	GRF	0400.0	0530.0	260.0	3.0	1.5		
	9400	TYKW	21	GRF	0405.0	0432.0	180.0	16.0	7.0		
	2000	TYKW	21	GRF	0405.0	0432.0	265.0	3.0	1.5		
	650	GORK	22	GRF	0406.0	0425.6	19.6U	10.0			
	950	GORK	20	GRF	0406.1	0409.7	151.2	5.0			
	1000	TYKW	45	C	0408.0	0426.9	25.0	17.0	3.0		
	100	HIRA	40	F	0408.6	0425.6	24.0	8.0	2.0		WL
	3750	TYKW	21	GRF	0412.0	0432.0	180.0	3.0	1.5		
	9395	PEKG	28	PRE	0418.0	0431.4	44.0	6.1	4.3		
	950	GORK	22	GRF	0421.4	0427.3	9.1	12.0			
	200	HIRA	41	F	0425.0	0427.3	9.3	13.0			0
	17000	NOBE	28	PRE	0429.9	0501.8	31.9	9.0			L
	15000	KISV	1	S	0430.0	0430.6	2.0	14.0			
	950	GORK	21	GRF	0437.6	0606.0	202.0	5.0			
	650	GORK	23	GRF	0449.6	0523.3	65.7	2.0			
	3750	TYKW	28	PRE	0450.0	0502.0	12.0	6.0	3.0		
	500	HIRA	45	C	0451.7	0459.1	8.8	20.0	10.0		WR
	1000	TYKW	45	C	0452.0	0455.3	10.0	2.5	1.0		
	2000	TYKW	28	PRE	0452.0	0502.7	10.7	2.0	1.0		
	650	GORK	46	C	0453.4	0455.2	7.1	9.5			
	650	GORK			0453.4	0459.2		13.5			
	9400	TYKW	28	PRE	0455.0	0502.0	7.0	7.0	3.0		
	15000	KISV			0459.4	0503.0		66.0			
	15000	KISV			0459.4	0505.6		140.0			
	15000	KISV	46	C	0459.4	0507.0	16.0	325.0			
	15000	KISV			0459.4	0512.5		323.0			
	3100	CRIM	46	C	0500.0	0501.0	15.0	3.0			
	3100	CRIM			0500.0	0506.8		52.0	17.0		
	3100	CRIM			0500.0	0511.8		47.0			
	19600	BERN	45	C	0501.0	0506.8	15.0	420.0U			
	35000	BERN	47	GB	0501.0	0506.8	15.0	536.0U			
	8400	BERN	45	C	0501.0	0512.4	15.0	334.0U			
	9100	GORK	46	C	0501.7	0506.8	15.4	130.0			
	9100	GORK			0501.7	0510.4		83.0			
	9100	GORK			0501.7	0512.3		270.0			
	17000	NOBE	7	C	0501.8	0506.9	14.4	313.0			L-R
	3750	TYKW	45	C	0502.0	0512.1	20.0	64.0	23.0		
	9400	TYKW	45	C	0502.0	0512.5	26.0	275.0	50.0		
	9395	PEKG	45	C	0502.0	0505.5	13.0	40.0	34.0		
	9395	PEKG			0502.0	0506.8		77.9			
	650	GORK	40	F	0502.0	0509.9	24.0	28.0			
	9395	PEKG			0502.0	0510.5		52.2			
	9395	PEKG			0502.0	0512.4		127.0			
	650	GORK			0502.0	0528.8		5.0			
	6100	KISV			0502.1	0503.2		13.0			
	6100	KISV			0502.1	0507.0		50.0			
	6100	KISV			0502.1	0510.3		50.0			
	6100	KISV	46	C	0502.1	0512.6	13.0	101.0			
	4995	MANI	46	C	0502.3	0512.5	13.9	169.3	56.4		
	2950	GORK	46	C	0502.7	0503.1	12.4	15.8			
	2950	GORK			0502.7	0505.4		14.6			

SOLAR RADIO EMISSION
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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
04	2950	GORK			0502.7	0507.0		40.0			
	2000	TYKW	45	C	0502.7	0507.0	12.3	38.0	12.0		
	2950	GORK			0502.7	0512.0		25.0			
	2950	GORK			0502.7	0512.5		25.0			
	8800	MANI	46	C	0502.8	0513.1	13.2	379.6	126.5		
	35000	NAGO	45	C	0503.0	0505.0	130.0D	26.0			SUNSET
	35000	NAGO			0503.0	0507.0		67.0			
	2695	MANI	46	C	0503.0	0507.7	14.0	52.4	17.5		
	35000	NAGO			0503.0	0512.0		75.0			
	35000	NAGO			0503.0	0521.0		55.0			
	2840	PEKG	45	C	0504.0E	0505.5	15.0D	24.6			
	2840	PEKG			0504.0E	0507.0		56.6			
	2840	PEKG			0504.0E	0510.1		23.7			
	2840	PEKG			0504.0E	0512.6		47.0			
	1000	TYKW	45	C	0504.5	0505.0	1.5	76.0	14.0		
	950	GORK	5	S	0504.6	0505.0	1.1	53.0			
	1415	MANI	46	C	0505.0	0505.6	9.0	47.3	15.8		
	1000	TYKW	45	C	0506.5	0509.5	9.0	18.0	2.5		
	2650	DWIN	2	S/F	0507.0U	0507.0					SUNRISE
	950	GORK	4	S/F	0508.0	0509.1	27.0	35.0			
	2000	TYKW	30	PBI	0515.0		195.0	9.0	4.5		
	9395	PEKG	30	PBI	0515.0		47.0	26.8			
	15000	KISV	29	PBI	0515.0	0515.0	28.0	62.0			
	3100	CRIM	29	PBI	0515.0	0515.0	20.0	14.0	5.0		
	6100	KISV	29	PBI	0515.0	0515.0	20.0	17.0			
	17000	NOBE	30	PBI	0516.2	0516.2	50.0	45.0			0
	3750	TYKW	30	PBI	0522.0		95.0	16.0	8.0		
	9395	PEKG	45	C	0522.0	0522.7	1.0	6.6	2.9		
	9400	TYKW	30	PBI	0528.0		90.0	28.0	14.0		
	3750	TYKW	45	C	0543.0	0546.2	12.0	26.0	6.0		
	9400	TYKW	45	C	0543.0	0546.2	10.0	51.0	14.0		
	2000	TYKW	45	C	0543.0	0547.6	8.0	48.0	6.0		
	1000	TYKW	45	C	0543.0	0547.6	8.0	125.0	9.0		
	8400	BERN	3	S	0543.0	0546.2	11.0	78.0			
	6100	KISV	4	S/F	0543.0	0546.5	11.0	45.0			
	15000	KISV	21	GRF	0543.3	0546.3	9.0	39.0			
	9100	GORK	4	S/F	0543.3	0548.1	5.2	48.0			
	500	HIRA	45	C	0543.7	0546.3	4.0	350.0	200.0		SL
	2950	GORK	4	S/F	0543.8	0546.3	5.4	14.6			
	950	GORK	46	C	0543.9	0546.6	5.2	7.0			
	650	GORK	46	C	0543.9	0546.8	4.3	60.0			
	650	GORK			0543.9	0547.6U		70.0D			
	950	GORK			0543.9	0548.5		11.0			
	3000	IZMI	5	S	0544.0	0546.0	4.5	17.0	8.0		
	2840	PEKG	45	C	0544.0E	0546.2	6.0D	24.6			
	2650	DWIN	2	S/F	0544.0	0547.0	5.0	20.0	10.0		
	2695	MANI	4	S/F	0544.0	0547.0	7.0	24.8	8.3		
	4995	MANI	4	S/F	0544.0	0547.0	9.0	65.7	21.9		
	2840	PEKG			0544.0E	0547.5		22.4			
	1415	MANI	4	S/F	0544.0	0548.0	4.0	107.7	35.9		
	8800	MANI	4	S/F	0544.5	0547.0	8.5	116.8	38.9		
	606	MANI	47	GB	0545.0	0548.0	3.5	936.4	312.1		
	9395	PEKG	5	S	0546.0	0546.2	7.0	22.2	5.7		
	17000	NOBE	1	S	0546.0	0546.2	2.0	13.0			0
	536	ONDR	41	F	0546.0E	0547.8	3.8D	31.8			
	9400	TYKW	29	PBI	0553.0		10.0	5.0	2.0		
	1000	TYKW	5	S	0625.1	0625.2	.5	6.0	1.5		
	650	GORK	21	GRF	0625.8						
	650	GORK	4	S/F	0627.3	0627.9	1.3	14.0	5.0		
	8800	MANI	4	S/F	0627.5	0628.7	2.2	163.5	54.5		
	4995	MANI	4	S/F	0627.5	0628.7	3.0	100.7	33.6		
	2695	MANI	4	S/F	0627.5	0628.8	3.5	37.3	12.4		
	606	MANI	4	S/F	0628.4	0629.7	2.1	106.8	35.6		
	3100	CRIM	3	S	0630.0	0632.0	4.0	36.0	12.0		
	2840	PEKG	45	C	0630.0	0632.2	9.0	45.2	5.9		
	9395	PEKG	45	C	0630.0	0632.2	12.0	44.1	5.0		
	9400	TYKW	45	C	0630.5	0632.1	3.0	95.0	28.0		
	15000	KISV			0630.6	0631.6		44.0			
	15000	KISV	45	C	0630.6	0632.2	25.0	75.0			
	3750	TYKW	45	C	0630.7	0632.1	3.3	42.0	15.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
04	930	BORD	46	C	0630.8	0631.2	2.3	138.0	15.0		
	9100	GORK	46	C	0630.8	0631.5	2.4	64.0			
	6100	KISV			0630.8	0631.6		51.0			
	9100	GORK			0630.8	0632.1		85.0			
	1000	TYKW	45	C	0630.8	0632.1	5.0	37.0	7.0		
	6100	KISV	45	C	0630.8	0632.2	2.5	62.0			
	950	GORK	4	S/F	0630.9	0632.0	2.3	25.0			
	2000	TYKW	5	S	0631.0	0632.2	4.0	28.0	7.0		
	808	ONDR	2	S/F	0631.0	0631.8	5.3	38.0	26.0		
	2950	GORK	3	S	0631.0	0632.0	3.0	28.0			
	3000	IZMI	5	S	0631.0	0632.0	1.0U	36.0	20.0		
	2650	DWIN	1	S	0631.0	0632.0	2.0	30.0	15.0		
	8400	BERN	4	S/F	0631.0	0632.1	3.0	154.0			
	19600	BERN	4	S/F	0631.0	0632.1	3.0	48.0			
	17000	NOBE	1	S	0631.1	0632.2	3.0	45.0			R
	650	GORK	4	S/F	0631.1	0638.7U	7.6U	70.0D			
	260	ONDR	2	S/F	0631.8	0632.7	2.4				
	536	ONDR	41	F	0631.8	0633.4	2.9	364.0			
	500	HIRA	45	C	0632.6	0633.1	1.4	5000.0	1000.0		O
	204	IZMI	4	S/F	0633.0	0633.8	1.2	400.0	160.0		
	200	HIRA	46	C	0633.0	0634.2	1.7	490.0	48.0		
	9400	TYKW	29	PBI	0633.5		18.0	12.0	7.0		
	3750	TYKW	29	PBI	0634.0		10.0	3.0	1.5		
	2000	TYKW	29	PBI	0635.0		6.0	2.0	1.0		
	6100	KISV			0636.4	0638.0		13.0			
	3100	CRIM	26	FAL	0648.0	0739.0		10.0			
	810	KRAK	8	S	0656.7	0656.7	.3	39.0			
	930	BORD	41	F	0656.7	0657.2	.6	292.0	3.0		
	1000	TYKW	5	S	0656.8	0657.1	.5	150.0	8.0		
	808	ONDR	8	S	0657.0	0657.2	.3	116.0			
	650	GORK	45	C	0705.0	0705.3	1.2	5.5			
	650	GORK			0705.0	0706.0		5.0			
	930	BORD	46	C	0709.8	0710.7	1.4	70.0	4.0		
	650	GORK	4	S/F	0710.4	0710.6	.6	10.0	5.0		
	950	GORK	4	S/F	0710.4	0710.6	.6	36.0			
	1000	TYKW	45	C	0710.5	0710.6	.5	54.0	12.0		
	808	ONDR	8	S	0710.5	0710.8	.4	24.0			
	810	KRAK	8	S	0710.6	0710.8	.6	37.0			
	9400	TYKW	20	GRF	0720.0	0752.0	65.0	9.0	4.0		
	3750	TYKW	20	GRF	0740.0	0750.0	50.0	2.0	1.0		
	15000	KISV	2	S/F	0750.2	0750.9	1.5	30.0			
	650	GORK	21	GRF	0840.7		48.3	2.0			
	650	GORK	2	S/F	0841.0	0841.7	1.1	5.0			
	9400	TYKW	5	S	0850.0	0850.7	2.0	12.0	4.0		
	3750	TYKW	5	S	0850.5	0850.7	1.5	5.0	2.0		
	2000	TYKW	5	S	0850.5	0850.7	1.5	5.0	2.0		
	9400	TYKW	45	C	0900.0	0912.9	18.0	93.0	24.0		
	8400	BERN	47	GB	0902.0	1033.7	180.0D	703.0			
	6100	KISV	4	S/F	0906.0	0913.5	13.0	44.0			
	3100	CRIM	20	GRF	0907.0	0912.5	8.0	9.0	3.0		
	15000	KISV	27	RF	0908.0	0913.4	12.0	80.0			
	3750	TYKW	45	C	0909.0	0913.1	9.0D	22.0	6.0D		
	19600	BERN	47	GB	0909.0	1033.5	180.0D	700.0			
	204	IZMI	42	SER	0909.8	0913.0	63.0	117.0			
	9100	GORK	4	S/F	0909.9	0913.3	6.4	45.0			
	930	BORD	41	F	0910.0	0912.0	8.0	81.0	4.0		
	260	ONDR	41	F	0910.0	0913.2	5.2	37.0	11.0		
	35000	BERN	47	GB	0910.0U	1033.5	100.0D	632.0			
	950	GORK	22	GRF	0910.3	0914.4	7.5	12.0			
	808	ONDR	2	S/F	0910.8	0911.9	2.0	28.0	28.0		
	2000	TYKW	5	S	0911.0	0913.1	4.0D	10.0	4.0D		
	200	HIRA	45	C	0912.8	0913.0	.8	150.0	25.0		
	100	HIRA	46	C	0913.0	0913.2	2.7	1200.0	306.0		WL
	650	GORK	4	S/F	0913.2	0913.8	2.3	9.0	4.5		
	9400	TYKW	29	PBI	0918.0		2.0D	22.0	21.0D		
	950	GORK	3	S	0921.8	0922.0	.6	14.0			
	930	BORD	41	F	0921.8	0922.1	.4	41.0	2.0		
	15000	KISV	4	S/F	0926.0	0927.6	4.0	82.0			
	6100	KISV	3	S	0926.5	0927.5	2.0	9.0			
	9100	GORK	1	S	0926.8	0927.6	1.7	18.0			

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Day	Freq	St.	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean	Int	Remarks
04	950	GORK	2	S/F	0931.7	0931.8	1.2	7.0			
	930	BORD	41	F	0931.8	0931.8	1.0	18.0	2.0		
	260	ONDR	8	S	0932.1	0932.1	.2	9.0			
	15000	KISV	1	S	0948.9	0949.2	.5	15.0			
	260	ONDR	41	F	0952.5	1011.0	20.4	7.0			
	9100	GORK	4	S/F	1032.9	1033.6	4.8	356.0			
	15000	KISV	4	S/F	1033.0	1033.5U	5.0	220.0D			
	810	KRAK	40	F	1110.1	1112.1	2.3	100.0			
	650	GORK	23	GRF	1142.0	1147.2	15.7	4.5			
	650	GORK	46	C	1144.1	1144.4	1.8	8.0			
	650	GORK			1144.1	1145.7		10.0			
	260	ONDR	8	S	1209.0	1209.1	.2	26.0			
	9400	HUAN	21	GRF	1212.8	1229.5	23.6	6.8	3.4		0
	9400	HUAN	2	S/F	1224.5	1226.0	2.8	8.4	5.7		0
	9400	HUAN	28	PRE	1308.5	1323.2	14.7	16.9	12.5		0
	9400	HUAN	3	S	1311.8	1313.1	3.5	30.4	11.5		R
	15000	KISV	28	PRE	1312.0	1313.1	2.0	34.0			
	6100	KISV	28	PRE	1312.0	1313.1	3.0	25.0			
	2800	OTTA	28	PRE	1312.5	1313.0	11.5	8.0			
	8400	BERN	47	GB	1312.5	1328.4	51.0	2366.0			
	35000	BERN	47	GB	1323.0	1328.2	40.0	5267.0			
	19600	BERN	47	GB	1323.0	1328.3	40.0	3115.0			
	9400	HUAN	45	C	1323.2	1342.8U	24.6	307.7	151.5		R
	6100	KISV			1323.4	1325.3		70.0			
	6100	KISV	47	GB	1323.4	1328.3	30.0	840.0			
	6100	KISV			1323.4	1331.7		380.0			
	6100	KISV			1323.4	1333.3		360.0			
	6100	KISV			1323.4	1342.3		280.0			
	6100	KISV			1323.4	1351.8		110.0			
	15000	KISV	47	GB	1323.5		30.0	580.0D			
	15000	KISV			1323.5			580.0D			
	15000	KISV			1323.5	1324.8		350.0			
	15000	KISV			1323.5	1339.3U		580.0D			
	15000	KISV			1323.5	1351.7		280.0			
	930	BORD	47	GB	1323.6	1340.0U	37.0	4050.0	559.0		
	930	BORD			1323.6	1342.4	37.0	3645.0			
	930	BORD			1323.6	1344.3		4050.0			
	930	BORD			1323.6	1349.8		203.0			
	930	BORD			1323.6	1352.0		1580.0			
	2800	OTTA	47	GB	1324.0	1328.5	23.0	595.0	113.0		
	808	ONDR	42	SER	1324.4		39.0U				
	2650	DWIN	47	GB	1326.0	1328.0	30.0	495.0	200.0		
	92500	BERN	46	C	1327.0U	1328.2	7.0U	48.0D			
	260	ONDR	42	SER	1330.0	1333.0U	44.0				
	536	ONDR	41	F	1331.8		42.0U	110.0	28.0		
	2800	OTTA	30	PBI	1347.0	1347.0	253.0	18.4			
	9400	HUAN	30	PBI	1347.8	1347.8	92.2	65.9	27.3		R
	2800	OTTA	3	S	1351.0	1351.8	3.0	63.0	20.0		
	15000	KISV	29	PBI	1353.5	1354.0		120.0			
	6100	KISV	29	PBI	1354.0	1354.0		45.0			
	2650	DWIN	47	GB	1419.0	1421.0	10.0	375.0	100.0		
	2800	OTTA	4	S/F	1419.0	1421.5	17.0	405.0	71.0		
	930	BORD	45	C	1419.0	1424.0	14.0	203.0	25.0		
	8400	BERN	47	GB	1419.4	1420.8	15.0	1363.0			
	9400	HUAN	45	C	1419.4	1424.2	15.1	451.2	149.1		R
	11800	BERN	47	GB	1419.6	1420.8	15.0	1378.0			
	19600	BERN	47	GB	1419.6	1421.1	15.0	664.0			
	35000	BERN	47	GB	1419.6	1421.3	15.0	542.0			
	2800	OTTA	29	PBI	1436.0	1436.0	50.0	4.6	2.3		
	9400	HUAN	1	S	1500.3	1502.0	3.8	6.8	3.4		0
	9400	HUAN	1	S	1508.6	1509.5	2.0	13.5	6.4		0
	9400	HUAN	2	S/F	1512.7	1514.8	3.4	8.4	3.7		0
	930	BORD	41	F	1520.0	1521.0	1.3	348.0	2.0		
	2800	OTTA	1	S	1540.5	1541.5	1.5	3.0	1.5		
	2800	OTTA	3	S	1549.0	1550.2	5.0	11.6	4.0		
	930	BORD	41	F	1650.4	1652.0	1.7	365.0	4.0		
	2800	OTTA	4	S/F	1651.2	1651.2	5.8	180.0	45.0		
	19600	BERN	4	S/F	1651.2	1653.1	8.0D	288.0			
	8400	BERN	4	S/F	1651.4	1652.8	8.0D	374.0			
	35000	BERN	4	S/F	1651.6	1653.3	8.0D	403.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
04	2800	OTTA	30	PBI	1657.0	1657.0	60.0	11.4	6.4		
	930	BORD	41	F	1739.0	1741.3	6.0	77.0	3.0		
	2800	OTTA	40	F	1740.0	1742.2	2.5	19.4			
	2800	OTTA	32A	ABS	1802.0	1935.0	140.0	-9.0	-5.0		
	9400	HUAN	45	C	1911.7	1917.5	8.8	137.1	38.8		0
	2800	OTTA	46F	C	1913.5	1917.8	17.0	290.0	27.0		
	9400	HUAN	4	S/F	1922.5	1924.5	6.3	96.8	32.1		R
	9400	HUAN	29	PBI	1928.8	1928.8	7.5	9.7	5.2		R
	9400	HUAN	23	GRF	1945.8	2040.6	93.8	21.0	7.4		0
	2800	OTTA	23	GRF	2024.0		120.0	6.2			
	9400	HUAN	4	S/F	2024.7	2029.0	10.8	25.8	16.3		0
	2800	OTTA	2	S/F	2025.0	2026.0	1.8	9.0	4.5		
	2800	OTTA	1	S	2028.7	2029.5	3.3	6.0	3.0		
	3750	TYKW	5	S	2115.0	2116.7	4.0	11.0	3.0		
	2000	TYKW	5	S	2115.0	2116.7	4.0	10.0	2.0		
	9400	TYKW	21	GRF	2115.0	2129.0	55.0	10.0	4.0		
	9400	HUAN	1	S	2115.3	2116.7	2.8	9.7	4.5		0
	9400	TYKW	45	C	2116.0	2117.0	3.0	8.0	2.5		
	2800	OTTA	3	S	2116.0	2116.7	3.0	15.4	5.1		
	3750	TYKW	21	GRF	2132.0	2142.0	45.0	3.0	1.5		
	1000	TYKW	45	C	2144.0	2144.6	3.0	105.0	12.0		
	3750	TYKW	45	C	2144.0	2145.2	3.0	7.0	3.0		
	2000	TYKW	45	C	2144.0	2145.3	3.0	15.0	2.5		
	9400	TYKW	45	C	2144.0	2146.2	4.0	43.0	11.0		
	100	HIRA	46	C	2144.3		3.0	10000.0D	630.0D		
	2800	OTTA	40	F	2144.5	2145.2	2.5	152.0			
	200	HIRA	46	C	2144.5	2146.3	2.6	2500.0	240.0		0
	9400	HUAN	4	S/F	2145.0	2145.6	2.4	33.9	19.5		R
	9400	HUAN			2145.0	2146.4		32.2			R
	17000	NOBE	1	S	2145.4	2146.3	3.0	49.0			R
	1000	TYKW	5	S	2147.8	2148.2	.8	3.0	.5		
	1000	TYKW	8	S	2211.8	2211.9	.2	60.0	20.0		
	9400	TYKW	5	S	2216.6	2217.3	4.0	12.0	4.0		
	9400	TYKW	21	GRF	2228.0	2252.0	90.0	11.0	6.0		
	9400	TYKW	5	S	2229.0	2231.0	6.0	3.0	1.0		
	2800	OTTA	21	GRF	2230.0	2305.0	120.0	4.6	2.0		
	3750	TYKW	21	GRF	2232.0	2304.0	115.0	7.0	3.0		
	9400	TYKW	5	S	2243.0	2244.0	2.5	5.0	2.0		
	3750	TYKW	45	C	2243.0	2244.3	40.0	4.0	1.5		
	2800	OTTA	1	S	2244.0	2244.5	2.0	3.0	1.5		
	9400	TYKW	5	S	2245.5	2246.3	2.5	4.0	1.5		
	2000	TYKW	5	S	2309.3	2309.5	1.0	6.0	2.0		
	100	HIRA	46	C	2309.3	2309.6	1.0	1900.0	380.0		WL
	1000	TYKW	47	GB	2309.3	2309.8	1.0	1280.0	250.0		
	500	HIRA	8	S	2309.6	2309.6	.3	16.0	12.0		SL
	606	MANI	8	S	2309.8	2310.3	.5	802.9	267.6		
	1415	MANI	8	S	2309.9	2310.4	.5	71.0	23.7		
05	33	UPIC	44	NS	0330.0E		900.0D				
	260	ONDR	44	NS	0653.0E	0803.0U	160.0D	222.0			
	29	UPIC	44	NS	0930.0E		900.0D				
	9400	TYKW	45	C	0007.0E	0017.0	15.0D	20.0	6.0D		
	3750	TYKW	45	C	0010.0	0016.6	12.0	14.0	3.5		
	2000	TYKW	45	C	0010.0	0016.8	11.0	5.0	1.0		
	1000	TYKW	5	S	0012.3	0012.5	.5	4.0	1.0		
	9400	TYKW	20	GRF	0030.0	0042.5	30.0	5.0	2.0		
	3750	TYKW	5	S	0035.0	0045.0	25.0	1.5	.7		
	1000	TYKW	45	C	0052.0	0053.7	4.0	2.0	.5		
	1000	TYKW	45	C	0057.6	0059.4	3.5	2.5	.7		
	1000	TYKW	45	C	0104.7	0107.7	3.5	2.0	.7		
	1000	TYKW	45	C	0111.7	0114.6	3.5	2.0	.7		
	17000	NOBE	28	PRE	0112.3	0124.9	12.6	18.0			0
	2840	PEKG	3	S	0120.0	0128.8	10.0	20.5	2.9		
	9395	PEKG	3	S	0120.0	0128.9	19.0	389.0	17.6		
	3750	TYKW	45	C	0123.0	0128.8	27.0	44.0	7.0		
	9400	TYKW	45	C	0123.0	0128.9	12.0	380.0	50.0		
	17000	NOBE	47	GB	0124.9	0128.9	9.7	938.0			L
	8800	MANI	3	S	0125.1	0129.5	6.9	343.2	114.4		
	1000	TYKW	45	C	0126.0	0129.0	4.0	1.0	.5		
	35000	NAGO	47	GB	0126.0	0129.0	4.0	840.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
05	4995	MANI	3	S	0128.3	0129.4	3.3	77.3	25.8		
	2695	PENT	4	S/F	0128.5	0128.8	2.0	15.2	4.0		
	2695	MANI	3	S	0128.9	0129.4	1.0	28.9	9.6		
	2000	TYKW	45	C	0130.0	0131.9	4.0	8.0	1.5		
	35000	NAGO	29	PBI	0131.0	0314.0	174.0	65.0			
	1000	TYKW	45	C	0133.0	0133.3	3.5	1.0	.5		
	17000	NOBE	29	PBI	0134.6	0134.6	20.0	45.0			0
	9400	TYKW	30	PBI	0135.0		460.0	40.0	15.0		
	2000	TYKW	28	PRE	0135.0	0249.0	74.0	3.0	1.5		
	1000	TYKW	42	SER	0145.0	0146.6	2.5	17.0	1.0		
	3750	TYKW	30	PBI	0150.0		58.0	8.0	8.0		
	1000	TYKW	8	S	0205.3	0205.4	.3	19.0	3.0		
	3750	TYKW	5	S	0213.0	0215.0	8.0	2.0	1.0		
	9400	TYKW	5	S	0213.0	0215.0	7.0	6.0	3.0		
	2840	PEKG	5	S	0214.0	0224.8	14.0	6.5	2.1		
	9395	PEKG	45	C	0214.0	0225.0	21.0	29.0	3.1		
	208	VORO	4	S/F	0224.0	0225.0	2.0	150.0D			
	17000	NOBE	20	GRF	0224.1	0314.9	96.0	82.0			R
	100	HIRA	46	C	0224.3	0224.7	1.3	2700.0	280.0		WL
	2000	TYKW	5	S	0224.5	0224.8	1.0	2.0	.7		
	9400	TYKW	45	C	0224.5	0224.8	7.5	35.0	7.0		
	1000	TYKW	5	S	0224.5	0224.9	1.2	10.0	3.0		
	3750	TYKW	5	S	0224.5	0224.9	1.5	4.5	1.5		
	200	HIRA	46	C	0224.6	0224.8	.8	670.0	195.0		0
	3750	TYKW	45	C	0230.0	0231.2	7.0	17.0	4.0		
	2840	PEKG	1	S	0230.6	0231.2	1.4	11.6	3.9		
	2000	TYKW	5	S	0230.9	0231.0	1.0	9.0	1.5		
	9400	TYKW	30	PBI	0232.0		16.5	11.0	9.0		
	1000	TYKW	45	C	0233.9	0234.5	1.3	100.0	6.0		
	3750	TYKW	30	PBI	0237.0		11.0	3.0	2.5		
	9395	PEKG	3	S	0247.0	0249.6	5.0	19.7	6.1		
	3750	TYKW	5	S	0248.0	0249.9	4.0	36.0	20.0		
	2840	PEKG	3	S	0248.0	0250.3	5.0	23.0	3.9		
	9400	TYKW	5	S	0248.5	0249.4	3.5	21.0	14.0		
	2000	TYKW	45	C	0249.0	0250.2	7.0	21.0	7.0		
	1000	TYKW	45	C	0249.0	0253.1	8.0	207.0	5.0D		
	2695	MANI	3	S	0249.0	0250.7	3.5	28.7	9.5		
	4995	MANI	3	S	0249.1	0250.5	3.4	39.2	13.1		
	8800	MANI	3	S	0249.1	0250.5	2.9	48.4	16.1		
	1415	MANI	3	S	0249.4	0250.8	4.6	22.6	7.5		
	3750	TYKW	30	PBI	0252.0		380.0	14.0	7.0		
	9400	TYKW	30	PBI	0252.0		16.0	11.0	11.0		
	2000	TYKW	30	PBI	0256.0		13.0U	3.0	3.0U		
	2840	PEKG	45	C	0304.0	0314.4	34.0	9.0	4.6		
	3750	TYKW	45	C	0307.0	0330.9	43.0	19.0	9.0		
	9400	TYKW	45	C	0308.0	0314.4	42.0	62.0	29.0		
	9395	PEKG	45	C	0308.0	0314.4	18.0	45.9	24.1		
	2000	TYKW	45	C	0309.0	0330.8	36.0	14.0	10.0		
	1000	TYKW	21	GRF	0309.0	0438.0	350.0	4.0	2.0		
	500	HIRA	45	C	0310.6	0311.3	1.0	80.0	30.0		0
	9100	GORK	21	GRF	0317.0E		410.0D				
	2950	GORK	21	GRF	0318.0E	0734.0	520.0D	132.0			
	650	GORK	40	F	0319.7E	0320.3	4.1D	20.0			
	1000	TYKW	5	S	0320.0	0320.2	1.0	2.5	.5		
	9395	PEKG	30	PBI	0326.0		27.0	27.5	13.6		
	9100	GORK	1	S	0330.0	0330.9	2.4	15.0	8.0		
	2840	PEKG	45	C	0330.0	0331.0	8.0	4.7	1.6		
	9395	PEKG	45	C	0330.0	0331.0	3.0	15.6	4.3		
	2950	GORK	1	S	0330.2	0330.8	1.5	4.2			
	650	GORK	46	C	0333.6	0334.0	6.1	67.0			
	950	GORK	46	C	0333.6	0334.1	3.5	103.0			
	950	GORK			0333.6	0335.4		58.0			
	650	GORK			0333.6	0336.3		67.0			
	950	GORK			0333.6	0336.8		80.0			
	1000	TYKW	45	C	0333.7	0334.8	3.5	95.0	8.0		
	2000	TYKW	30	PBI	0345.0		330.0D	10.0	8.0D		
	3750	TYKW	30	PBI	0350.0		50.0	4.0	2.0		
	9400	TYKW	30	PBI	0350.0		70.0	20.0	10.0		
	950	GORK	46	C	0357.0	0358.6	4.3	150.0			
	950	GORK			0357.0	0400.9		71.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
05	1000	TYKW	45	C	0357.5	0358.6	2.5	240.0	5.0		
	650	GORK	41	F	0358.2	0358.6	4.5	68.0			
	650	GORK			0358.2	0401.0		68.0			
	2000	TYKW	5	S	0400.3	0401.0	1.5	1.5	.5		
	1000	TYKW	5	S	0400.5	0400.9	1.0	60.0	14.0		
	2000	TYKW	45	C	0410.0	0416.6	13.0	21.0	2.0		
	3750	TYKW	45	C	0410.0	0416.7	20.0	18.0	3.0		
	2840	PEKG	45	C	0410.0	0416.9	11.0	12.6	4.0		
	650	GORK	1	S	0410.9	0411.1	.5	2.0			
	1000	TYKW	5	S	0410.9	0411.2	.5	2.0	.5		
	9400	TYKW	45	C	0411.0	0416.6	13.0	58.0	10.0		
	6100	KISV			0411.0	0411.7		4.0			
	6100	KISV			0411.0	0414.0		11.0			
	2950	GORK	40	F	0411.0	0414.0	10.3	9.6			
	2950	GORK			0411.0	0416.7		10.8			
	6100	KISV	41	F	0411.0	0416.7	13.0	23.0			
	9395	PEKG	45	C	0411.0	0416.9	14.0	53.2	13.0		
	4995	MANI	23	GRF	0411.0	0417.3	10.7	39.2	13.1		
	6100	KISV			0411.0	0418.6		13.0			
	9395	PEKG			0411.0	0418.8		31.2			
	6100	KISV			0411.0	0419.9		11.0			
	6100	KISV			0411.0	0422.7		6.0			
	8800	MANI	23	GRF	0413.0	0417.3	8.0	62.9	21.0		
	9100	GORK	46	C	0413.3	0416.7	7.6	55.0			
	9100	GORK			0413.3	0418.6		27.0			
	9100	GORK			0413.3	0420.0		23.0			
	15000	KISV	21	GRF	0413.5	0416.6	10.0	36.0			
	1000	TYKW	42	SER	0413.7	0413.9	1.5	5.0	.5		
	950	GORK	46	C	0413.7	0415.9	7.7	25.0			
	950	GORK			0413.7	0416.6		67.0			
	1415	MANI	4	S/F	0413.8	0417.2	5.7	60.5	20.2		
	2695	MANI	4	S/F	0413.8	0417.3	4.2	15.1	5.0		
	650	GORK	41	F	0415.8	0415.8	12.9	35.0			
	1000	TYKW	45	C	0415.8	0416.7	4.5	65.0	5.0		
	650	GORK			0415.8	0416.8		45.0			
	650	GORK			0415.8	0422.6		38.0			
	500	HIRA	45	C	0416.3	0416.4	2.0	70.0	16.0		0
	606	MANI	4	S/F	0416.3	0417.3	2.7	53.0	17.7		
	1000	TYKW	5	S	0422.0	0422.6	1.0	3.0	1.0		
	2000	TYKW	29	PBI	0423.0		30.0	2.0	1.0		
	9400	TYKW	29	PBI	0424.0		7.0	5.0	2.0		
	1000	TYKW	8	S	0429.5	0429.6	.2	13.0	5.0		
	950	GORK	8	S	0435.6	0435.9	.6	149.0			
	1000	TYKW	8	S	0435.7	0435.8	.3	140.0	25.0		
	9400	TYKW	45	C	0436.0	0437.3	2.0	10.0	2.0		
	9395	PEKG	45	C	0438.0	0439.2	7.0	14.7	3.2		
	9400	TYKW	5	S	0438.5	0439.0	1.5	19.0	7.0		
	9100	GORK	1	S	0438.7	0439.2	.9	12.0	6.0		
	9400	TYKW	29	PBI	0440.0		10.0	4.0	2.0		
	1000	TYKW	45	C	0441.7	0441.8	.7	52.0	9.0		
	650	GORK	46	C	0441.7	0441.9U	1.9	65.0D			
	950	GORK	41	F	0441.7	0441.9	1.6	63.0			
	950	GORK			0441.7	0442.9		22.0			
	650	GORK			0441.7	0443.0		130.0			
	1000	TYKW	45	C	0442.4	0442.9	1.0	26.0	7.0		
	35000	NAGO			0500.0	0729.0		130.0			
	35000	NAGO	47	GB	0500.0	0615.0	190.0D	700.0			SUNSET
	2000	TYKW	5	S	0509.0	0509.4	1.0	1.5	.5		
	1000	TYKW	5	S	0509.0	0509.5	1.0	113.0	19.0		
	3750	TYKW	5	S	0509.0	0509.6	2.0	6.0	1.5		
	9400	TYKW	5	S	0509.0	0509.8	3.0	6.0	2.0		
	650	GORK	8	S	0509.0	0509.3U	.8	200.0D			
	500	HIRA	45	C	0509.0	0509.3	.5	10.0	6.0		SL
	950	GORK	4	S/F	0509.0	0509.5	1.2	132.0			
	2950	GORK	1	S	0509.1	0509.6	.8	3.6	1.8		
	9100	GORK	1	S	0509.2	0509.2	.9	6.0	3.0		
	9400	TYKW	5	S	0529.0	0529.9	1.5	7.0	4.0		
	9400	TYKW	29	PBI	0530.5		10.0	4.0	2.0		
	9400	TYKW	28	PRE	0542.0	0556.0	32.0	8.0	5.0		
	1000	TYKW	8	S	0544.0	0544.1	.3	1.5	.5		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
05	650	GORK	4	S/F	0548.5	0553.7U	7.5	67.0			
	1000	TYKW	5	S	0550.0	0550.4	1.0	4.0	.7		
	3750	TYKW	28	PRE	0553.0	0553.7	21.0	4.0	1.5		
	2000	TYKW	5	S	0553.0	0553.7	3.0	3.0	1.0		
	950	GORK	4	S/F	0553.2	0553.7	2.7	147.0			
	1000	TYKW	45	C	0553.3	0553.8	1.0	115.0	15.0		
	2950	GORK	1	S	0553.5	0553.8	.8	2.4	1.2		
	1000	TYKW	45	C	0554.3	0555.2	1.5	10.0	1.5		
	1000	TYKW	42	SER	0605.0	0615.1	29.0	95.0	4.0		
	1000	TYKW			0605.0	0627.0		93.0			
	650	GORK	41	F	0610.7	0613.9	4.6	22.0			
	650	GORK			0610.7	0615.0U		650.0D			
	610	LEAR	49	GB	0610.8	0615.1	4.5	1699.0			QL=6 ST=2 TYP=6
	9395	PEKG	47	GB	0612.0	0616.0	7.0	1749.0	331.0		
	950	GORK	4	S/F	0613.0	0615.1	2.8	67.0			
	9100	GORK	4	S/F	0613.8	0616.2	7.2	1250.0			
	17000	NOBE	47	GB	0613.9	0616.0	5.7	1260.0			R
	9400	TYKW	47	GB	0614.0	0616.1	22.0	1290.0	135.0		
	3750	TYKW	45	C	0614.0	0616.3	15.0	152.0	27.0		
	15000	KISV			0614.0	0614.6		123.0			
	6100	KISV			0614.0	0614.7		61.0			
	35000	BERN	47	GB	0614.0	0615.7	4.0D	1904.0			
	19600	BERN	47	GB	0614.0	0616.0	4.0D	1205.0			
	11800	BERN	47	GB	0614.0	0616.0	4.0D	914.0			
	15000	KISV	47	GB	0614.0	0616.0	5.0	1310.0			
	8400	BERN	47	GB	0614.0	0616.1	4.0D	1417.0			
	6100	KISV	45	C	0614.0	0616.3	6.0	370.0			
	4995	MANI	47	GB	0614.0	0616.8	8.0	612.5	204.2		
	2840	PEKG	3	S	0614.0	0616.9	10.0	146.0			
	15400	LEAR	49	GB	0614.1	0616.0	22.2	1300.0			QL=6 ST=2 TYP=6
	8800	LEAR	49	GB	0614.1	0616.1	18.0	1300.0			QL=6 ST=2 TYP=6
	4995	LEAR	47	GB	0614.3	0616.3	12.8	410.0			QL=6 ST=2 TYP=5
	8800	MANI	47	GB	0614.7	0616.8	8.1	1742.4	580.8		
	500	HIRA	45	C	0614.8	0615.0	.4	10.0	7.0		SL
	92500	BERN	46	C	0615.0	0615.7	4.0D	296.0U			
	3000	IZMI	7	C	0615.0	0616.0	6.0	82.0	35.0		
	606	MANI	8	S	0615.3	0615.7	.7	1388.5	462.8		
	2950	GORK	46	C	0615.3	0615.8	5.0	78.0			
	2950	GORK			0615.3	0616.3		53.0			
	2950	GORK			0615.3	0618.0		26.0			
	2000	TYKW	45	C	0615.5	0615.9	5.5	250.0	15.0		
	2695	LEAR	47	GB	0615.6	0615.8	3.5	310.0			QL=6 ST=2 TYP=5
	2695	MANI	4	S/F	0616.0	0616.3	7.0	354.9	118.3		
	9395	PEKG	30	PBI	0619.0		41.0D	122.0			
	15000	KISV	29	PBI	0619.0	0619.0		68.0			
	17000	NOBE	30	PBI	0619.6	0619.6	67.0	65.0			0
	6100	KISV	29	PBI	0620.0	0620.0		28.0			
	2000	TYKW	30	PBI	0621.0		10.0	2.0	1.0		
	9395	PEKG	3	S	0622.0	0623.2	3.0	10.6	7.5		
	650	GORK	4	S/F	0625.9	0627.0	7.1	9.0			
	950	GORK	46	C	0626.0	0626.9	4.9	49.0			
	950	GORK			0626.0	0628.0		34.0			
	204	IZMI	41	F	0626.0	0628.2	4.0	136.0			
	200	HIRA	42	SER	0626.0	0628.3	4.0	220.0			WL
	930	BORD	42	SER	0626.0	0638.0U	81.0	704.0U	3.0		
	930	BORD			0626.0	0733.2		56.0			
	2000	TYKW	5	S	0626.2	0626.6	1.0	3.0	.7		
	3750	TYKW	30	PBI	0629.0		150.0	10.0	5.0		
	1000	TYKW	47	GB	0634.0	0639.3	15.0	3420.0	150.0		
	9395	PEKG	45	C	0635.0	0636.7	8.0	69.5	10.2		
	2000	TYKW	5	S	0635.5	0636.6	2.5	10.0	2.5		
	950	GORK	46	C	0635.5	0636.9	7.1	150.0D			
	950	GORK			0635.5	0639.8		1732.0			
	500	HIRA	45	C	0635.6	0637.2	2.0	30.0	8.0		SL
	650	GORK	47	GB	0635.7	0636.7U	25.1	70.0D			
	650	GORK			0635.7	0639.8		1060.0			
	650	GORK			0635.7	0640.3U		1070.0D			
	650	GORK			0635.7	0656.0		140.0			
	9400	TYKW	30	PBI	0636.0		140.0	38.0	14.0		
	2840	PEKG	3	S	0636.0	0636.8	2.0	21.8			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
05	200	HIRA	46	C	0636.2	0636.7	3.7	205.0	60.0		WL
	204	IZMI	41	F	0636.2	0636.8	4.0	134.0			
	100	HIRA		C	0636.3	0636.5	4.4	10000.0D	2600.0D		
	3750	TYKW	45	C	0636.3	0636.6	2.0	12.0	3.0		
	15000	KISV	4	S/F	0636.3	0636.6	2.0	130.0			
	9400	TYKW	45	C	0636.4	0636.6	4.6	72.0	17.0		
	6100	KISV	45	C	0636.4	0636.6	2.0	24.0			
	17000	NOBE	2	S/F	0636.5	0636.6	2.0	93.0			R
	9100	GORK	4	S/F	0636.5	0636.7	1.2	100.0	50.0		
	2950	GORK	3	S	0636.5	0636.7	1.2	13.0	6.5		
	2000	TYKW	29	PBI	0638.0		5.0	2.0	1.0		
	9400	TYKW	30	PBI	0641.0		31.0	10.0	5.0		
	17000	NOBE	2	S/F	0645.0	0649.9	12.0	56.0			O
	9400	TYKW	45	C	0647.0	0649.9	11.0	29.0	9.0		
	2000	TYKW	5	S	0649.5	0649.9	1.5	5.0	1.0		
	9100	GORK	4	S/F	0649.8	0654.2	7.8	24.0			
	2000	TYKW	5	S	0651.0	0654.0	8.0	2.0	1.0		
	1000	TYKW	42	SER	0653.0	0655.9	10.0	240.0	6.0		
	950	GORK	4	S/F	0655.5	0656.9	1.4U	149.0			
	950	GORK	2	S/F	0658.0	0658.8	1.2	8.0			
	2000	TYKW	28	PRE	0703.0	0726.0	23.0	2.0	1.0		
	1000	TYKW	45	C	0703.5	0713.6	12.5	40.0	4.0		
	950	GORK	41	F	0708.3	0712.5	7.5	24.0			
	950	GORK			0708.3	0713.6		26.0			
	950	GORK			0708.3	0715.6		21.0			
	650	GORK	40	F	0709.0	0713.7	7.1	23.0			
	650	GORK			0709.0	0715.6		16.0			
	808	ONDR	41	F	0711.0	0729.0U	36.0				
	810	KRAK	42	SER	0712.0	0733.1	34.0	600.0D			
	1000	TYKW	28	PRE	0720.0	0727.7	9.0	52.0	8.0		
	2840	PEKG	45	C	0724.0	0728.0	7.0	233.0	30.8		
	536	ONDR	7	C	0724.2	0808.0	73.0	318.0			
	2950	GORK	4	S/F	0725.6	0727.8	3.4	285.0			
	2000	TYKW	45	C	0726.0	0727.8	14.0	192.0	25.0		
	3750	TYKW	47	GB	0726.0	0727.9	19.0	545.0	60.0		
	2650	DWIN	45	C	0726.0	0727.0	15.0	250.0	100.0		
	9100	GORK	4	S/F	0726.3	0727.9	5.1	2300.0			
	500	HIRA	40	F	0726.4	0729.0	18.0	300.0			WL
	9400	TYKW	47	GB	0726.5	0728.0	26.0	2470.0	140.0		
	950	GORK	46	C	0726.5	0729.3	11.4	149.0			
	950	GORK			0726.5	0733.2		165.0			
	950	GORK			0726.5	0737.5		268.0			
	17000	NOBE	47	GB	0726.6	0727.9	11.9	1570.0			L
	650	GORK	46	C	0726.6	0729.2	19.2	67.0			
	650	GORK			0726.6	0733.1		70.0D			
	650	GORK			0726.6	0737.6		78.0			
	650	GORK			0726.6	0745.5		140.0			
	430	KRAK	42	SER	0727.0	0729.5	18.0	590.0D			
	4995	MANI	47	GB	0727.1	0728.5	5.9	1084.5	316.5		
	2695	MANI	4	S/F	0727.1	0728.5	4.9	214.4	71.5		
	1415	MANI	4	S/F	0727.2	0728.3	5.8	136.8	45.6		
	8800	MANI	47	GB	0727.5	0728.5	5.5	1321.3	440.4		
	3000	IZMI	5	S	0728.0	0729.2	4.8	245.0	180.0		
	200	HIRA	42	SER	0728.0	0736.8	15.6	155.0			O
	1000	TYKW	47	GB	0729.0	0729.4	9.0	1270.0	70.0		
	1000	TYKW			0729.0	0733.2		770.0			
	1000	TYKW			0729.0	0737.5		280.0			
	2840	PEKG	30	PBI	0731.0		14.0	5.2	2.5		
	2840	PEKG	45	C	0731.0	0733.8	8.0	21.4	6.0		
	3000	IZMI	29	PBI	0732.8	0735.0	9.0	30.0	16.0		
	204	IZMI	4	S/F	0736.5	0736.7	.8	146.0	56.0		
	1000	TYKW	30	PBI	0738.0		30.0	4.0	2.0		
	17000	NOBE	29	PBI	0738.5	0738.5	20.0D	23.0			O
	2000	TYKW	30	PBI	0740.0		80.0	10.0	4.0		
	1000	TYKW	45	C	0744.0	0745.3	2.0	235.0	30.0		
	2000	TYKW	45	C	0744.3	0745.2	1.5	12.0	1.5		
	950	GORK	45	C	0744.4	0745.2	1.4	129.0			
	950	GORK			0744.4	0745.5		65.0			
	3750	TYKW	29	PBI	0745.0		50.0	6.0	3.0		
	650	GORK	30	PBI	0745.8	0745.8	33.7	2.0			

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05	650	GORK	40	F	0802.2	0807.6	5.7	30.0			
	1000	TYKW	45	C	0839.0	0839.8	4.0	270.0	10.0		
	930	BORD	46	C	0839.3	0839.5	3.7	448.0	6.0		
	650	GORK	4	S/F	0839.3	0839.8U	2.7	66.0			
	950	GORK	41	F	0839.3	0839.8	3.4	147.0			
	950	GORK			0839.3	0841.7		12.0			
	2950	GORK	1	S	0839.5	0839.8	.9	8.4			
	6100	KISV	2	S/F	0839.5	0839.9	1.5	7.0			
	9100	GORK	1	S	0839.7	0839.9	.9	8.0	4.0		
	810	KRAK	42	SER	0839.7	0840.2	11.0	600.0D			
	808	ONDR	8	S	0839.8	0839.9	.8	64.0			
	1000	TYKW	45	C	0849.0	0849.3	2.0	19.0	1.5		
	650	GORK	41	F	0849.2	0849.3	1.8	21.0			
	650	GORK			0849.2	0850.7		22.0			
	930	BORD	8	S	0849.3	0849.4	.2	62.0	2.0		
	1000	TYKW	42	SER	0905.3	0906.3	3.5	35.0	1.0		
	950	GORK	2	S/F	0906.2	0906.3	1.1	36.0			
	808	ONDR	8	S	0906.3	0906.3	.1	20.0			
	930	BORD	41	F	0906.3	0906.3	1.0	120.0	2.0		
	650	GORK	4	S/F	0906.3	0906.7	.9	25.0			
	650	GORK	2	S/F	0925.0	0925.1	.5	5.5			
	950	GORK	2	S/F	0925.0	0925.1	.5	11.0			
	650	GORK	40	F	0932.9	0933.0	2.8	19.0			
	650	GORK			0932.9	0935.3		7.0			
	650	GORK	41	F	0949.8	0950.1	3.7	20.0			
	650	GORK			0949.8	0951.7		6.0			
	430	KRAK	4	S/F	0956.3	0958.5	3.3	240.0	15.0		
	6100	KISV	4	S/F	0956.6	0957.8	3.0	24.0			
	930	BORD	41	F	0957.0	0957.5	1.3	26.0	2.0		
	9100	GORK	2	S/F	0957.0	0957.9	2.2	24.0	12.0		
	6100	KISV	20	GRF	1029.5	1031.5	18.0	7.0			
	930	BORD	8	S	1049.2	1049.2	.1	52.0	1.0		
	260	ONDR	8	S	1053.9	1054.0	.1	9.0			
	6100	KISV	21	GRF	1059.0	1106.0	13.0	7.0			
	6100	KISV			1059.0	1205.9		20.0			
	6100	KISV	45	C	1059.0	1206.2		25.0			
	810	KRAK	8	S	1112.7	1112.7	.3	210.0			
	930	BORD	41	F	1113.3	1113.4	1.3	200.0	2.0		
	15000	KISV	2	S/F	1113.4	1114.3	1.5	37.0			
	260	ONDR	8	S	1125.8	1125.8	.1	3.0			
	2800	OTTA	23	GRF	1130.0		90.0	3.0	2.3		
	260	ONDR	8	S	1142.9	1142.9	.2	4.0			
	260	ONDR	8	S	1144.8	1144.8	.1	5.0			
	2800	OTTA	8	S	1151.2	1151.4	.8	3.0	1.5		
	9400	HUAN	4	S/F	1204.6	1206.0	4.2	165.2	57.0		0
	15000	KISV			1205.0	1205.9		285.0			
	15000	KISV	45	C	1205.0	1206.2	2.0	370.0			
	2800	OTTA	4	S/F	1205.7	1206.0	1.0	42.0			
	2650	DWIN	8	S	1206.0	1206.0	1.0	950.0	40.0		
	15000	KISV	29	PBI	1206.8	1206.8	8.0	17.0			
	9400	HUAN	29	PBI	1208.8	1208.8	18.4	14.1	5.3		0
	9400	HUAN	3	S	1239.6	1240.6	5.1	22.8	9.8		0
	15000	KISV	1	S	1240.2	1240.6	1.0	17.0			
	6100	KISV	20	GRF	1240.2	1241.0	7.0	7.0			
	9400	HUAN	20	GRF	1305.3	1313.0	12.3	7.0	3.2		0
	15000	KISV	20	GRF	1325.0	1333.0	30.0	38.0			
	2800	OTTA	8	S	1325.8	1325.8	.1	4.4			
	2800	OTTA	23	GRF	1355.0	1530.0	325.0	14.8			
	19600	BERN	46	C	1400.0U	1514.0	120.0D	264.0			
	35000	BERN	46	C	1400.0U	1514.0	120.0D	170.0			
	8400	BERN	46	C	1400.0U	1514.0	180.0D	95.0			
	11800	BERN	46	C	1400.0U	1553.8	180.0D	250.0			
	260	ONDR	8	S	1403.8	1403.9	.3	22.0			
	9400	HUAN	21	GRF	1407.7	1537.2	153.8	51.0	20.6		0
	930	BORD	8	S	1421.1	1421.1	.1	30.0	1.0		
	9400	HUAN	3	S	1427.1	1429.2	4.2	21.1	10.5		0
	9400	HUAN	3	S	1444.1	1445.2	2.0	28.1	11.2		0
	930	BORD	41	F	1449.0	1449.2	1.0	34.0	3.0		
	2800	OTTA	8	S	1449.0	1449.5	.8	2.4	1.2		
	9400	HUAN	2	S/F	1457.0	1457.6	2.5	17.6	8.8		0

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05	2800	OTTA	45	C	1457.3	1457.7	2.0	11.0	4.0		
	930	BORD	41	F	1459.9	1501.0	3.6	26.0	3.0		
	9400	HUAN	1	S	1509.0	1509.4	1.3	15.8	11.2	0	
	2800	OTTA	46F	C	1511.5	1513.1	3.0	12.6	4.8		
	9400	HUAN	4	S/F	1512.4	1514.0	3.3	168.8	50.4	0	
	930	BORD	8	S	1512.8	1512.8	.1	24.0	1.0		
	9400	HUAN	4	S/F	1527.0	1529.6	5.8	54.5	31.1	0	
	2800	OTTA	1	S	1528.0	1528.5	1.0	7.4	3.4		
	930	BORD	46	C	1531.4	1531.7	.3U	48.0	4.0		
	2800	OTTA	1	S	1531.6	1531.9	1.0	4.8	2.4		
	9400	HUAN	1	S	1548.5	1549.6	1.9	8.8	2.5	0	
	9400	HUAN	4	S/F	1553.1	1553.7	2.6	160.0	54.5	0	
	9400	HUAN	4	S/F	1604.7	1606.4	3.2	24.6	8.2	0	
	9400	HUAN	3	S	1621.3	1622.5	3.1	28.1	12.6	0	
	9400	HUAN	21	GRF	1714.2	1735.7	21.5U	24.6	12.9	0	
	9400	HUAN	4	S/F	1720.4	1722.2	4.2	21.1	12.0	0	
	9400	HUAN	2	S/F	1727.5	1730.2	4.8	10.5	5.3	0	
	2800	OTTA	46F	C	1729.0	1739.7	17.0	64.0	15.2		
	930	BORD	46	C	1734.0	1740.0	10.0	180.0	12.0		
	9400	HUAN	3	S	1738.2	1740.0	5.3	22.8	10.5	R	
	245	SGMR	47	GB	1738.3	1740.6	2.5	60.0		QL=6 ST=2 TYP=5	
	410	SGMR	47	GB	1738.5	1738.6	2.6	200.0		QL=6 ST=2 TYP=5	
	4995	SGMR	47	GB	1738.6	1739.6	2.9	59.0		QL=6 ST=2 TYP=5	
	2695	SGMR	47	GB	1738.6	1740.3	3.0	50.0		QL=6 ST=2 TYP=5	
	610	SGMR	47	GB	1738.6	1740.6	4.5	57.0		QL=6 ST=2 TYP=5	
	1415	SGMR	4	S/F	1738.8	1739.8	2.3	48.0		QL=6 ST=2 TYP=3	
	2650	DWIN	1	S	1739.0	1740.0	4.0	50.0	25.0		
	610	PALE	8	S	1740.3	1740.5	.8	44.0		QL=6 ST=2 TYP=3	
	1415	PALE	8	S	1740.3	1740.5	.8	47.0		QL=6 ST=2 TYP=3	
	2695	PALE	47	GB	1740.3	1740.5	2.0	64.0		QL=6 ST=2 TYP=5	
	4995	PALE	47	GB	1740.3	1740.5	3.0	88.0		QL=6 ST=2 TYP=5	
	410	PALE	47	GB	1740.3	1740.8	.8	139.0		QL=6 ST=2 TYP=5	
	15400	PALE	20	GRF	1740.3	1741.1	1.0	33.0		QL=6 ST=2 TYP=2	
	15400	PALE	20	GRF	1753.5	1755.3	2.3	40.0		QL=6 ST=2 TYP=2	
	8800	PALE	47	GB	1753.8	1755.1	1.5	78.0		QL=6 ST=2 TYP=5	
	8800	PALE	47	GB	1819.6	1819.8	.2	62.0		QL=5 ST=2 TYP=5	
	8800	PALE	47	GB	1827.6	1827.8	.4	93.0		QL=5 ST=2 TYP=5	
	930	BORD	8	S	1828.0	1828.4	.4U	56.0	1.0		
	9400	HUAN	20	GRF	1837.4	1853.4	40.1	14.1	6.2	0	
	8800	PALE	49	GB	1911.8	1912.3	.8	2000.0		QL=5 ST=2 TYP=6	
	9400	HUAN	23	GRF	1924.0	1936.5	30.3	8.8	3.5	0	
	245	PALE	47	GB	1926.8	1927.0	.3	400.0		QL=6 ST=2 TYP=5	
	245	SGMR	47	GB	1926.8	1927.0	.3	300.0		QL=6 ST=2 TYP=5	
	9400	HUAN	1	S	1927.7	1930.2	5.5	15.8	8.8	0	
	245	PALE	49	GB	1941.3	1941.5	3.5	189.0		QL=6 ST=2 TYP=6	
	245	SGMR	47	GB	1941.3	1941.5	3.8	86.0		QL=6 ST=2 TYP=5	
	610	PALE	47	GB	1941.3	1943.1	2.3	90.0		QL=6 ST=2 TYP=5	
	9400	HUAN	4	S/F	1941.5	1944.7	5.3	26.4	12.5	R	
	610	SGMR	47	GB	1942.8	1943.1	2.5	80.0		QL=6 ST=2 TYP=5	
	500	HIRA			1943.3	1947.5		80.0		SL	
	500	HIRA	41	F	1943.3	1950.0	36.0	120.0		MR	
	410	SGMR	49	GB	1944.0	1944.3	1.1	1000.0		QL=6 ST=2 TYP=6	
	410	PALE	49	GB	1944.0	1944.6	1.1	1699.0		QL=6 ST=2 TYP=6	
	15400	PALE	8	S	1944.3	1944.6	1.2	22.0		QL=6 ST=2 TYP=3	
	100	HIRA	42	SER	1944.4	2016.2	34.0	6000.0		WL	
	2800	OTTA	3	S	1949.8	1950.0	2.5	12.0	4.0		
	2695	PALE	8	S	1949.8	1950.1	1.0	13.0		QL=6 ST=2 TYP=3	
	610	PALE	47	GB	1949.8	1950.1	1.0	139.0		QL=6 ST=2 TYP=5	
	410	PALE	47	GB	1949.8	1950.3	1.0	51.0		QL=6 ST=2 TYP=5	
	610	SGMR	47	GB	1950.1	1950.3	.5	119.0		QL=6 ST=2 TYP=5	
	410	SGMR	8	S	1950.3	1950.3	.3	43.0		QL=6 ST=2 TYP=3	
	9400	HUAN	21	GRF	1957.8	2007.5	93.8	26.4	12.2	0	
	610	SGMR	47	GB	2001.0	2003.1	3.6	370.0		QL=6 ST=2 TYP=5	
	2695	SGMR	4	S/F	2001.1	2002.6	2.4	17.0		QL=6 ST=2 TYP=3	
	610	PALE	47	GB	2001.1	2003.1	2.0	370.0		QL=6 ST=2 TYP=5	
	4995	SGMR	8	S	2001.5	2002.6	2.0	15.0		QL=6 ST=2 TYP=3	
	9400	HUAN	1	S	2001.7	2002.5	2.6	19.3	12.6	R	
	410	SGMR	47	GB	2001.8	2002.1	.8	100.0		QL=6 ST=2 TYP=5	
	410	PALE	47	GB	2001.8	2002.1	.5	119.0		QL=6 ST=2 TYP=5	
	245	PALE	49	GB	2001.8	2002.1	1.0	1199.0		QL=6 ST=2 TYP=6	

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
05	245	SGMR	47	GB	2002.0	2002.1	.8	660.0			QL=6 ST=2 TYP=5
	1415	PALE	8	S	2002.1	2002.3	.2	20.0			QL=6 ST=2 TYP=3
	1415	SGMR	8	S	2002.1	2002.3	.9	23.0			QL=6 ST=2 TYP=3
	8800	PALE	4	S/F	2002.5	2002.8	5.6	38.0			QL=6 ST=2 TYP=3
	4995	PALE	8	S	2002.5	2002.8	.6	23.0			QL=6 ST=2 TYP=3
	15400	PALE	4	S/F	2002.6	2002.8	5.5	23.0			QL=6 ST=2 TYP=3
	245	SGMR	47	GB	2013.3	2013.3	.5	90.0			QL=6 ST=2 TYP=5
	610	SGMR	47	GB	2013.3	2014.1	4.3	330.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	2013.3	2017.8	5.7	139.0			QL=6 ST=2 TYP=5
	610	PALE	47	GB	2013.6	2014.1	5.4	370.0			QL=6 ST=2 TYP=5
	9400	HUAN	2	S/F	2015.2	2016.0	3.0	10.5	4.6		0
	410	SGMR	47	GB	2015.8	2016.0	.3	430.0			QL=6 ST=2 TYP=5
	410	PALE	49	GB	2015.8	2016.0	3.2	600.0			QL=6 ST=2 TYP=6
	1415	PALE	4	S/F	2016.0	2016.1	3.0	24.0			QL=6 ST=2 TYP=3
	9400	TYKW	45	C	2100.0E	2113.6U	20.0D	30.0	18.0D		
	500	HIRA	41	F	2102.3	2103.7	3.6	60.0			ML
	610	SGMR	49	GB	2102.3	2105.5	3.8	2000.0			QL=6 ST=2 TYP=6
	1000	TYKW	45	C	2103.5	2104.0	1.0	6.0	1.5		
	610	PALE	49	GB	2103.5	2105.5	2.6	2199.0			QL=6 ST=2 TYP=6
	1000	TYKW	45	C	2105.0	2105.3	1.5	80.0	10.0		
	1000	TYKW	47	GB	2109.0	2110.4	2.0	1240.0	70.0		
	610	SGMR	47	GB	2109.6	2110.1	1.2	200.0			QL=6 ST=2 TYP=5
	610	PALE	47	GB	2109.8	2110.1	1.0	210.0			QL=6 ST=2 TYP=5
	2000	TYKW	45	C	2110.0	2110.3	1.0	24.0	10.0		
	3750	TYKW	5	S	2110.0	2110.4	1.5	12.0	5.0		
	100	HIRA	42	SER	2110.0		5.0	10000.0D			
	2800	OTTA	1	S	2110.0	2110.3	1.0	9.6	4.8		
	245	SGMR	47	GB	2110.1	2110.1	.7	210.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	2110.1	2110.1	.7	400.0			QL=6 ST=2 TYP=5
	1415	PALE	47	GB	2110.1	2110.3	.4	66.0			QL=6 ST=2 TYP=5
	1415	SGMR	47	GB	2110.1	2110.3	.5	59.0			QL=6 ST=2 TYP=5
	410	SGMR	8	S	2110.1	2110.3	.2	21.0			QL=6 ST=2 TYP=3
	2000	TYKW	30	PBI	2111.0		15.0	2.0	1.0		
	1000	TYKW	5	S	2113.0	2113.6	2.0	135.0	25.0		
	2800	OTTA	1	S	2113.0	2113.5	2.0	3.0	1.4		
	610	PALE	47	GB	2113.1	2113.6	1.7	380.0			QL=6 ST=2 TYP=5
	9400	HUAN	2	S/F	2113.2	2115.0	3.4	14.1	3.9		0
	9400	HUAN			2113.2	2115.5		13.2			
	610	SGMR	47	GB	2113.3	2113.6	1.8	290.0			QL=6 ST=2 TYP=5
	2000	TYKW	5	S	2113.3	2113.6	1.5	12.0	2.0		
	1415	SGMR	8	S	2113.3	2113.6	.5	48.0			QL=6 ST=2 TYP=3
	9400	TYKW	29	PBI	2120.0		20.0	12.0	4.0		
	9400	TYKW	21	GRF	2154.0	2205.0	125.0	7.0	3.0		
	610	SGMR	8	S	2203.1	2203.3	.2	39.0			QL=6 ST=2 TYP=3
	1000	TYKW	5	S	2238.0	2238.5	1.0	4.0	1.5		
	3750	TYKW	21	GRF	2240.0	2248.0	100.0	7.0	3.0		
	9400	TYKW	21	GRF	2242.0	2249.0	65.0	7.0	3.0		
	1000	TYKW	8	S	2302.4	2302.5	.2	16.0	4.0		
	1000	TYKW	42	SER	2313.0	2316.4	4.0	36.0	3.0		
	3750	TYKW	45	C	2313.0	2319.1	13.0	74.0	6.0		
	500	HIRA	41	F	2313.0	2318.0	10.6	1800.0			WL
	2000	TYKW	5	S	2313.7	2314.0	1.7	3.0	.5		
	2000	TYKW	5	S	2316.0	2316.3	1.0	25.0	6.0		
	610	PALE	47	GB	2316.1	2316.3	.2	390.0			QL=6 ST=2 TYP=5
	610	SGMR	49	GB	2316.1	2316.3	3.0	360.0			QL=6 ST=2 TYP=6
	410	PALE	49	GB	2316.1	2316.3	.4	800.0			QL=6 ST=2 TYP=6
	410	SGMR	47	GB	2316.1	2316.3	.4	400.0			QL=6 ST=2 TYP=5
	2695	MANI	4	S/F	2317.0	2320.1	8.7	85.6	28.5		
	1415	MANI	4	S/F	2317.1	2320.1	5.0	137.2	45.7		
	1000	TYKW	5	S	2317.5	2317.8	1.0	7.0	2.5		
	2000	TYKW	45	C	2317.5	2319.0	7.5	210.0	15.0		
	208	VORO	4	S/F	2318.0	2318.0	1.0	51.0D			
	610	PALE	49	GB	2318.3	2318.5	.7	1399.0			QL=6 ST=2 TYP=6
	1415	SGMR	47	GB	2318.3	2319.0	2.0	139.0			QL=6 ST=2 TYP=5
	2695	SGMR	47	GB	2318.3	2319.1	2.2	55.0			QL=6 ST=2 TYP=5
	245	SGMR	8	S	2318.5	2318.6	.3	390.0			QL=6 ST=2 TYP=3
	410	PALE	49	GB	2318.5	2318.6	.6	830.0			QL=6 ST=2 TYP=6
	245	PALE	49	GB	2318.5	2318.6	.3	820.0			QL=6 ST=2 TYP=6
	1415	PALE	47	GB	2318.5	2318.8	1.8	230.0			QL=6 ST=2 TYP=5
	1000	TYKW	45	C	2318.5	2319.0	2.5	49.0	13.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
05	2695	LEAR	47	GB	2318.5	2319.0	2.8	95.0			QL=5 ST=2 TYP=5
	9400	TYKW	45	C	2318.5	2319.1	9.5	39.0	9.0		
	2695	PALE	47	GB	2318.6	2318.8	.7	93.0			QL=6 ST=2 TYP=5
	1415	LEAR	47	GB	2318.6	2319.0	1.9	169.0			QL=5 ST=2 TYP=5
	17000	NOBE	1	S	2318.7	2322.8	7.0	14.0			L
	4995	PALE	8	S	2318.8	2319.0	.3	36.0			QL=6 ST=2 TYP=3
	1000	TYKW	45	C	2321.7	2322.2	3.0	7.0	2.0		
	1000	TYKW	32	ABS	2325.0	2335.0	25.0	-1.0	-.5		
	2000	TYKW	31	ABS	2325.0	2340.0	30.0	-2.0	-1.0		
	3750	TYKW	31	ABS	2326.0	2340.0	30.0	-3.0	-1.5		
	200	HIRA	27	RF	2327.3	2336.5	31.0	7.0	2.0		0
	410	LEAR	8	S	2328.6	2328.8	.4	30.0			QL=5 ST=2 TYP=3
	1000	TYKW	8	S	2356.5	2356.6	.2	4.0	1.0		
06	410	LEAR	43	NS	0052.8	0110.8	19.8	11.0			QL=6 ST=2 TYP=1
	245	SGMR	43	NS	1246.0	1256.1		55.0			QL=6 ST=3 TYP=1
	410	SGMR	43	NS	1247.5	1457.0		139.0			QL=6 ST=3 TYP=1
	1000	TYKW	8	S	0017.4	0017.5	.4	2.5	1.0		
	1000	TYKW	45	C	0019.6	0020.2	.8	5.0	1.0		
	3750	TYKW	21	GRF	0040.0	0043.0	35.0	4.0	1.5		
	2000	TYKW	20	GRF	0040.0	0047.0	50.0	2.0	1.0		
	1000	TYKW	45	C	0044.9	0045.0	1.0	22.0	4.0		
	1000	TYKW	8	S	0052.0	0052.1	.2	20.0	4.0		
	3750	TYKW	45	C	0104.0	0107.8	10.0	3.0	1.5		
	1000	TYKW	8	S	0107.8	0107.9	.2	4.0	1.0		
	1000	TYKW	5	S	0112.2	0112.4	.5	5.0	1.5		
	1000	TYKW	45		0138.0	0140.3	6.0	7.0	1.5		
	245	LEAR	8	S	0202.0	0202.3	.6	20.0			QL=6 ST=2 TYP=3
	410	LEAR	47	GB	0202.0	0202.5	.8	130.0			QL=6 ST=2 TYP=5
	3750	TYKW	20	GRF	0208.0	0219.5	45.0	6.0	3.0		
	9400	TYKW	21	GRF	0208.0	0223.0	145.0	10.0	4.0		
	2000	TYKW	20	GRF	0209.0	0219.0	50.0	3.0	1.5		
	610	LEAR	8	S	0239.6	0240.3	.7	28.0			QL=6 ST=2 TYP=3
	410	LEAR	47	GB	0252.3	0254.6	2.8	56.0			QL=6 ST=2 TYP=5
	245	LEAR	4	S/F	0252.3	0254.6	2.8	25.0			QL=6 ST=2 TYP=3
	9400	TYKW	45	C	0254.0	0308.7	26.0	20.0	9.0D		
	3750	TYKW	45	C	0254.0	0309.0	20.0	8.0	4.0D		
	9100	GORK	23	GRF	0306.0E		360.0D				
	15400	LEAR	4	S/F	0306.6	0308.1	9.0	37.0			QL=6 ST=2 TYP=3
	17000	NOBE	1	S	0306.6	0308.3	8.0	28.0			0
	8800	LEAR	4	S/F	0307.1	0308.8	8.5	19.0			QL=6 ST=2 TYP=3
	2950	GORK	21	GRF	0310.4	0638.0	328.0D	11.0			
	3750	TYKW	30	PBI	0314.0		50.0	5.0	2.0		
	9400	TYKW	30	PBI	0320.0		50.0	8.0	4.0		
	3750	TYKW	5	S	0320.0	0328.6	25.0	5.0	2.0		
	9400	TYKW	45	C	0323.0	0328.7	10.0	10.0	5.0		
	9400	TYKW	29	PBI	0333.0		10.0	4.0	2.0		
	650	GORK	41	F	0343.5	0347.8	10.5	48.0			
	650	GORK			0343.5	0351.3		9.0			
	500	HIRA	41	F	0345.9	0346.0	4.0	48.0			WL
	2000	TYKW	5	S	0346.0	0346.5	1.0	4.0	1.5		
	3750	TYKW	28	PRE	0346.0	0351.0	5.0	3.0	1.5		
	410	LEAR	8	S	0346.0	0346.3	1.8	34.0			QL=6 ST=2 TYP=3
	610	LEAR	47	GB	0346.1	0347.3	1.9	81.0			QL=6 ST=2 TYP=5
	1000	TYKW	5	S	0346.3	0346.4	.5	8.0	2.5		
	950	GORK	2	S/F	0346.4	0346.4	.4	13.0			
	2000	TYKW	28	PRE	0347.0	0351.0	4.0	3.0	1.5		
	2840	PEKG	3	S	0349.0	0351.4	12.0	47.7	9.3		
	950	GORK	2	S/F	0350.5	0351.2	2.7	1.0			
	1000	TYKW	45	C	0350.6	0352.0	2.4	7.0	1.5		
	9400	TYKW	5	S	0351.0	0351.4	6.0	11.0	3.0		
	3750	TYKW	5	S	0351.0	0351.4	5.0	41.0	12.0		
	2000	TYKW	45	C	0351.0	0351.5	3.0	54.0	12.0		
	2695	PALE	8	S	0351.0	0351.3	1.0	41.0			QL=6 ST=2 TYP=3
	2950	GORK	3	S	0351.0	0351.5	3.0	42.0			
	9100	GORK	1	S	0351.0	0351.5	1.3	9.0	4.5		
	4995	PALE	8	S	0351.1	0351.3	.5	24.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0351.1	0351.3	.7	28.0			QL=6 ST=2 TYP=3
	1415	PALE	8	S	0351.1	0351.3	.4	19.0			QL=6 ST=2 TYP=3
	1415	MANI	3	S	0352.0	0352.8	2.5	17.9	6.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
06	4995	MANI	3	S	0352.0	0352.9	5.0	63.7	21.2		
	2695	MANI	3	S	0352.3	0352.9	3.2	52.7	17.6		
	2000	TYKW	29	PBI	0354.0		20.0	4.0	1.5		
	3750	TYKW	29	PBI	0356.0		6.0	2.0	1.0		
	3750	TYKW	20	GRF	0414.0	0425.0	35.0	2.0	1.0		
	6100	KISV	20	GRF	0424.0	0428.0	15.0	5.0			
	9400	TYKW	45	C	0426.0	0426.3	3.0	16.0	3.0		
	410	LEAR	8	S	0441.1	0441.3	.2	41.0			QL=6 ST=2 TYP=3
	9400	TYKW	21	GRF	0502.0	0532.0	55.0	13.0	5.0		
	4995	LEAR	4	S/F	0504.3	0508.5	5.7	15.0			QL=6 ST=2 TYP=3
	8800	LEAR	4	S/F	0504.5	0508.5	5.6	17.0			QL=6 ST=2 TYP=3
	3750	TYKW	45	C	0505.0	0508.2	15.0	9.0	5.0		
	9400	TYKW	5	S	0505.0	0508.4	9.0	13.0	4.0		
	2000	TYKW	21	GRF	0505.0	0640.0	170.0	4.0	2.0		
	15400	LEAR	4	S/F	0505.5	0508.0	3.5	9.0			QL=6 ST=2 TYP=3
	6100	KISV	45	C	0505.7	0508.0	6.5	11.0			
	6100	KISV			0505.7	0508.5		13.0			
	9100	GORK	45	C	0507.6	0507.9	2.2	6.6			
	9100	GORK			0507.6	0508.5		8.6	4.0		
	9400	TYKW	45	C	0516.0	0517.0	3.0	9.0	3.0		
	4995	LEAR	4	S/F	0516.0	0517.0	4.8	8.0			QL=6 ST=2 TYP=3
	8800	LEAR	4	S/F	0516.0	0517.0	5.3	13.0			QL=6 ST=2 TYP=3
	9100	GORK	1	S	0516.4	0517.0	1.5	7.0	3.5		
	6100	KISV	2	S/F	0516.4	0517.0	2.0	7.0			
	3750	TYKW	30	PBI	0520.0		130.0	5.0	2.0		
	15400	LEAR	4	S/F	0522.0	0526.0	11.0	8.0			QL=6 ST=2 TYP=3
	8800	LEAR	4	S/F	0522.0	0529.1	11.0	13.0			QL=6 ST=2 TYP=3
	9400	TYKW	21	GRF	0602.0	0621.0	85.0	12.0	4.0		
	3750	TYKW	21	GRF	0603.0E	0622.0	85.0D	4.0	2.0D		
	410	LEAR	47	GB	0607.0	0607.1	.1	62.0			QL=6 ST=2 TYP=5
	2650	DWIN	2	S/F	0620.0	0623.0	10.0	30.0	20.0		
	6100	KISV	2	S/F	0620.2	0620.8	3.0	5.0			
	650	GORK	40	F	0631.7	0635.9	7.3	3.5			
	6100	KISV	21	GRF	0635.0	0637.6	8.0	10.0			
	9395	PEKG	4	S/F	0635.0	0637.6	5.0	46.4	12.4		
	9400	TYKW	5	S	0636.0	0637.5	4.0	45.0	18.0		
	8400	BERN	41	F	0636.0	0637.4	18.0	48.0			
	11800	BERN	41	F	0636.0	0637.5	18.0U	63.0			
	19600	BERN	3	S	0636.0	0637.6	6.0	111.0			
	4995	LEAR	4	S/F	0636.1	0637.5	5.9	10.0			QL=6 ST=2 TYP=3
	15400	LEAR	47	GB	0636.1	0637.6	5.9	87.0			QL=6 ST=2 TYP=5
	8800	LEAR	4	S/F	0636.3	0637.5	4.7	36.0			QL=6 ST=2 TYP=3
	8800	ATHN	4	S/F	0636.6	0638.0	2.7	21.0			QL=6 ST=2 TYP=3
	9100	GORK	3	S	0636.7	0637.6	2.5	30.0			
	15000	KISV	4	S/F	0636.8	0637.6	6.0	97.0			
	17000	NOBE	1	S	0636.9	0637.6	7.1	67.0			0
	3750	TYKW	45	C	0637.0E	0706.4	50.0D	10.0	4.0D		
	9400	TYKW	30	PBI	0640.0		45.0	10.0	5.0		
	17000	NOBE	20	GRF	0644.0	0701.1	43.0	24.0			0
	9400	TYKW	45	C	0650.0	0651.5	7.0	14.0	8.0		
	6100	KISV	45	C	0650.5	0651.5	7.0	10.0			
	6100	KISV			0650.5	0654.8		9.0			
	8800	LEAR	4	S/F	0650.8	0651.5	2.2	20.0			QL=6 ST=2 TYP=3
	9400	TYKW	29	PBI	0657.0		28.0	6.0	3.0		
	610	LEAR	8	S	0700.1	0700.8	.9	10.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0700.1	0700.8	1.0	38.0			QL=6 ST=2 TYP=3
	500	HIRA	41	F	0700.3	0700.6	7.6	45.0			ML
	430	KRAK	2	S/F	0700.5	0701.0	1.8	220.0			
	810	KRAK	2	S/F	0701.0	0701.0	1.5	150.0	45.0		
	260	ONDR	40	F	0704.8	0713.0	13.0	24.0	6.0		
	2000	TYKW	45	C	0705.0	0713.3	12.0	5.0	2.5		
	1000	TYKW	5	S	0705.5	0706.3	1.5	7.0	1.5		
	410	LEAR	47	GB	0706.3	0706.5	.5	100.0			QL=6 ST=2 TYP=5
	245	LEAR	4	S/F	0711.8	0713.6	2.3	18.0			QL=6 ST=2 TYP=3
	2000	TYKW	29	PBI	0717.0		10.0	1.5	.7		
	3750	TYKW	31	ABS	0730.0	0820.0	110.0D	-8.0	-5.0D		
	9400	TYKW	32	ABS	0735.0	0800.0	85.0	-14.0	-7.0		
	536	ONDR	2	S/F	0742.0	0744.3	5.2	6.0	4.0		
	1000	TYKW	8	S	0756.7	0756.8	.2	14.0	3.0		
	260	ONDR	40	F	0803.9	0804.0	5.0	20.0	1.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
06	430	KRAK	8	S	0813.2	0813.7	.8	305.0			
	536	ONDR	7	C	0814.2	0814.8	.8	6.0			
	430	KRAK	45	C	0823.8	0825.4	10.3	600.0D			
	430	KRAK			0823.8	0828.5		600.0D			
	245	LEAR	8	S	0905.0	0905.1	.1	20.0			QL=6 ST=2 TYP=3
	6100	KISV	21	GRF	0910.0	0912.5	20.0	12.0			
	8800	ATHN	4	S/F	0911.6	0912.6	12.2	15.0			QL=6 ST=2 TYP=3
	4995	ATHN	4	S/F	0911.8	0912.6	12.0	16.0			QL=6 ST=2 TYP=3
	500	HIRA	45	C	0916.2	0916.7	.6	210.0	40.0		ML
	260	ONDR	40	F	0916.7	0916.9	1.4	9.0	5.0		
	536	ONDR	7	C	0916.7	0917.1	.9	59.0	38.0		
	245	LEAR	8	S	0916.8	0916.8	.3	25.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0916.8	0917.1	.3	20.0			QL=6 ST=2 TYP=3
	536	ONDR	8	S	0937.6	0937.6	.1	8.0			
	810	KRAK	8	S	0939.7	0939.7	.4	40.0			
	536	ONDR	7	C	0944.0	0950.0	8.0	20.0	18.0		
	260	ONDR	40	F	0944.5	0944.6	1.8	61.0			
	6100	KISV	20	GRF	1023.5	1025.0	15.0	8.0			
	15000	KISV	2	S/F	1024.3	1024.8	3.0	33.0			
	260	ONDR	8	S	1033.9	1033.9	.1	4.0			
	4995	SGMR	8	S	1047.1	1048.6	1.5	19.0			QL=3 ST=2 TYP=3
	8800	SGMR	4	S/F	1048.3	1049.3	7.8	30.0			QL=3 ST=2 TYP=3
	15400	SGMR	4	S/F	1048.8	1049.0	3.3	46.0			QL=3 ST=2 TYP=3
	2800	OTTA	2	S/F	1051.6	1052.2	9.0	9.0	3.0		
	260	ONDR	40	F	1101.0	1106.0	8.0	4.0	1.0		
	2800	OTTA	1	S	1104.2	1105.0	3.0	2.4	1.2		
	6100	KISV	2	S/F	1151.0	1152.2	2.0	9.0			
	260	ONDR	41	F	1156.0	1405.0U	157.0D	57.0U			
	245	SGMR	8	S	1203.3	1203.3	.3	23.0			QL=6 ST=2 TYP=3
	2800	OTTA	23	GRF	1210.0	1435.0	220.0	16.4	5.5		
	9400	HUAN	3	S	1225.6	1226.5	2.2	41.8	21.8		0
	245	SGMR	47	GB	1230.3	1230.5	.7	63.0			QL=6 ST=2 TYP=5
	410	SGMR	8	S	1230.3	1230.6	.7	22.0			QL=6 ST=2 TYP=3
	930	BORD	46	C	1240.0	1242.0	3.0	28.0	3.0		
	410	SGMR	47	GB	1240.6	1241.8	1.5	139.0			QL=6 ST=2 TYP=5
	536	ONDR	40	F	1240.8	1242.0	2.1	14.0	6.0		
	610	SGMR	8	S	1242.0	1242.1	.1	23.0			QL=6 ST=2 TYP=3
	9400	HUAN	23	GRF	1243.0	1434.7	175.7	81.7	25.2		R
	536	ONDR	7	C	1247.8	1247.9	1.1	11.0	6.0		
	8800	SGMR	4	S/F	1248.5	1250.3	5.6	29.0			QL=3 ST=2 TYP=3
	6100	KISV	21	GRF	1249.0	1249.8	10.0	7.0			
	4995	SGMR	8	S	1249.3	1250.3	1.0	18.0			QL=3 ST=2 TYP=3
	15400	SGMR	8	S	1249.6	1250.5	.9	42.0			QL=3 ST=2 TYP=3
	245	SGMR	47	GB	1251.8	1251.8	.5	169.0			QL=6 ST=2 TYP=5
	410	SGMR	47	GB	1252.1	1252.1	.2	54.0			QL=6 ST=2 TYP=5
	536	ONDR	8	S	1257.8	1257.9	.3	2.0			
	6100	KISV	21	GRF	1313.0	1328.0	50.0	21.0			
	536	ONDR	41	F	1324.2	1408.0U	69.0	14.0			
	19600	BERN	41	F	1325.0U	1422.6	115.0U	82.0			
	8400	BERN	41	F	1325.0U	1429.4	115.0U	122.0			
	8800	SGMR	4	S/F	1325.8	1326.3	9.5	44.0			QL=3 ST=2 TYP=3
	8800	ATHN	4	S/F	1325.8	1326.6	5.8	28.0			QL=6 ST=3 TYP=3
	2800	OTTA	1	S	1326.0	1326.3	2.0	3.0	1.5		
	15000	KISV	4	S/F	1326.0	1326.4	1.0	57.0			
	4995	SGMR	8	S	1326.1	1326.3	.7	21.0			QL=3 ST=2 TYP=3
	15400	SGMR	8	S	1326.1	1326.3	.4	39.0			QL=3 ST=2 TYP=3
	4995	ATHN	4	S/F	1326.1	1326.6	5.5	18.0			QL=6 ST=3 TYP=3
	8800	SGMR	47	GB	1420.5	1422.6	17.1	91.0			QL=3 ST=2 TYP=5
	2800	OTTA	4	S/F	1421.0	1424.0	15.0	27.0	12.0		
	4995	SGMR	47	GB	1421.6	1422.6	16.0	50.0			QL=3 ST=2 TYP=5
	9400	HUAN	3	S	1421.6	1422.6	2.0	74.4	35.6		R
	4995	ATHN	4	S/F	1421.8	1423.0	14.8	44.0			QL=6 ST=2 TYP=3
	2695	ATHN	4	S/F	1421.8	1424.5	16.0	21.0			QL=6 ST=2 TYP=3
	8800	ATHN	47	GB	1421.8	1429.8	21.2	80.0			QL=6 ST=2 TYP=5
	15400	SGMR	47	GB	1422.3	1422.6	15.3	86.0			QL=3 ST=2 TYP=5
	2695	SGMR	4	S/F	1422.3	1424.1	15.3	32.0			QL=3 ST=2 TYP=3
	9400	HUAN	4	S/F	1426.8	1428.9	4.5	61.7	38.1		0
	610	SGMR	47	GB	1502.8	1503.0	.3	50.0			QL=6 ST=2 TYP=5
	410	SGMR	8	S	1502.8	1503.0	.3	30.0			QL=6 ST=2 TYP=3
	9400	HUAN	2	S/F	1505.8	1507.1	3.8	16.3	6.0		L

SOLAR RADIO EMISSION
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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
06	9400	HUAN	47	GB	1625.0	1633.8	15.4	5883.8	1017.9		L
	1415	ATHN	49	GB	1629.0	1632.1	32.5	3000.0			QL=6 ST=2 TYP=6
	8800	ATHN	49	GB	1629.0	1632.6	67.6	2300.0			QL=6 ST=2 TYP=6
	4995	ATHN	49	GB	1629.0	1633.3	67.6	2600.0			QL=6 ST=2 TYP=6
	2695	ATHN	49	GB	1629.0	1635.1	67.6	3500.0			QL=6 ST=2 TYP=6
	8800	SGMR	49	GB	1629.8	1634.0	12.0	3399.0			QL=6 ST=2 TYP=7
	2800	OTTA	47	GB	1630.0	1634.5	180.0	2815.0			
	2650	DWIN	49	GB	1630.0	1635.0	90.0				
	15400	SGMR	49	GB	1630.1	1634.1	11.7	8900.0			QL=6 ST=2 TYP=7
	4995	SGMR	49	GB	1630.3	1633.3	11.5	3000.0			QL=6 ST=2 TYP=7
	11800	BERN	47	GB	1630.5	1634.2	14.0	4024.0			
	19600	BERN	47	GB	1630.5	1634.2	14.0	3980.0			
	35000	BERN	47	GB	1630.5	1634.2	14.0	7624.0			
	8400	BERN	47	GB	1630.5	1637.8U	14.0D	2561.0D			
	2695	SGMR	49	GB	1630.8	1634.1	11.0	3300.0			QL=6 ST=2 TYP=7
	1415	SGMR	49	GB	1631.6	1635.3	10.2	2000.0			QL=6 ST=2 TYP=7
	930	BORD	28	PRE	1632.0	1637.0	82.0	2320.0	300.0		
	610	SGMR	49	GB	1633.0	1635.3	8.8	320.0			QL=6 ST=2 TYP=7
	410	SGMR	49	GB	1633.1	1633.8	8.7	200.0			QL=6 ST=2 TYP=7
	245	SGMR	49	GB	1634.8	1635.1	7.0	2699.0			QL=6 ST=2 TYP=7
	9400	HUAN	30	PBI	1640.4	1640.4	248.6	617.4	132.9		L
	1415	SGMR	47	GB	1641.8	1642.8	11.5	280.0			QL=6 ST=2 TYP=5
	245	SGMR	47	GB	1641.8	1643.1	11.5	130.0			QL=6 ST=2 TYP=5
	410	SGMR	47	GB	1641.8	1643.1	11.5	119.0			QL=6 ST=2 TYP=5
	610	SGMR	47	GB	1641.8	1643.1	11.5	260.0			QL=6 ST=2 TYP=5
	9400	HUAN	4	S/F	1642.2	1642.6	1.6	181.6	147.6		L
	9400	HUAN	3	S	1646.1	1646.1	1.8	109.0	30.0		0
	15400	SGMR	47	GB	1653.3	1655.3	17.7	99.0			QL=6 ST=2 TYP=5
	8800	SGMR	47	GB	1653.3	1655.3	17.7	110.0			QL=6 ST=2 TYP=5
	1415	SGMR	47	GB	1653.3	1655.6	17.7	219.0			QL=6 ST=2 TYP=5
	610	SGMR	49	GB	1653.3	1655.8	17.7	940.0			QL=6 ST=2 TYP=6
	245	SGMR	49	GB	1653.3	1656.3	17.7	480.0			QL=6 ST=2 TYP=6
	410	SGMR	49	GB	1653.3	1656.5	17.7	1199.0			QL=6 ST=2 TYP=6
	4995	SGMR	47	GB	1654.3	1655.5	16.7	70.0			QL=6 ST=2 TYP=5
	2695	SGMR	47	GB	1654.5	1655.3	16.5	110.0			QL=6 ST=2 TYP=5
	1415	ATHN	49	GB	1701.5	1715.8	35.1	219.0			QL=6 ST=2 TYP=6
	9400	HUAN	4	S/F	1703.6	1704.8	2.5	72.6	36.3		0
	9400	HUAN	8	S	1708.2	1708.6	.9	90.8	45.9		0
	1415	SGMR	49	GB	1711.0	1711.1	10.8	189.0			QL=6 ST=2 TYP=6
	410	SGMR	49	GB	1711.0	1711.1	10.8	910.0			QL=6 ST=2 TYP=6
	610	SGMR	47	GB	1711.0	1711.1	10.8	280.0			QL=6 ST=2 TYP=5
	4995	SGMR	20	GRF	1711.0	1711.3	10.8	42.0			QL=6 ST=2 TYP=2
	2695	SGMR	47	GB	1711.0	1711.3	10.8	69.0			QL=6 ST=2 TYP=5
	245	SGMR	49	GB	1711.0	1711.6	10.8	660.0			QL=6 ST=2 TYP=6
	8800	SGMR	4	S/F	1711.3	1711.3	10.5	20.0			QL=6 ST=2 TYP=3
	410	SGMR	49	GB	1721.8	1721.8	13.2	440.0			QL=6 ST=2 TYP=6
	610	SGMR	49	GB	1721.8	1722.3	13.2	360.0			QL=6 ST=2 TYP=6
	245	SGMR	47	GB	1721.8	1722.3	13.2	60.0			QL=6 ST=2 TYP=5
	1415	SGMR	49	GB	1721.8	1725.0	13.2	230.0			QL=6 ST=2 TYP=6
	2695	SGMR	47	GB	1725.3	1725.6	9.7	130.0			QL=6 ST=2 TYP=5
	2695	SGMR	47	GB	1746.3	1746.5	16.3	62.0			QL=6 ST=2 TYP=5
	1415	SGMR	49	GB	1746.3	1746.5	16.3	340.0			QL=6 ST=2 TYP=6
	610	SGMR	49	GB	1746.3	1747.5	16.3	290.0			QL=6 ST=2 TYP=6
	410	SGMR	49	GB	1746.3	1748.0	16.3	210.0			QL=6 ST=2 TYP=6
	245	SGMR	20	GRF	1746.3	1748.0	16.3	17.0			QL=6 ST=2 TYP=2
	930	BORD	47	GB	1754.0	1804.0U	46.0D	4560.0D	1700.0D		
	930	BORD			1754.0	1820.0		4560.0D			
	2650	DWIN	49	GB	1755.0						SUNSET
	8800	SGMR	47	GB	1755.6	1802.6	7.0	280.0			QL=6 ST=2 TYP=5
	9400	HUAN	47	GB	1755.6	1809.8	22.7	1425.6	768.2		L
	4995	SGMR	47	GB	1755.8	1802.6	6.8	380.0			QL=6 ST=2 TYP=5
	1415	SGMR	49	GB	1802.6	1802.8	12.2	1800.0			QL=6 ST=2 TYP=6
	410	SGMR	49	GB	1802.6	1803.8	12.2	12000.0			QL=6 ST=2 TYP=6
	610	SGMR	49	GB	1802.6	1803.8	12.2	20000.0			QL=6 ST=2 TYP=6
	245	SGMR	49	GB	1802.6	1804.5	12.2	1199.0			QL=6 ST=2 TYP=6
	2695	SGMR	49	GB	1802.6	1804.8	12.2	1100.0			QL=6 ST=2 TYP=6
	4995	SGMR	49	GB	1802.6	1804.8	12.2	690.0			QL=6 ST=2 TYP=6
	8800	SGMR	49	GB	1802.6	1804.8	12.2	470.0			QL=6 ST=2 TYP=6
	15400	SGMR	47	GB	1806.3	1809.5	8.5	200.0			QL=6 ST=2 TYP=5
	8800	SGMR	49	GB	1814.8	1815.0	9.8	770.0			QL=6 ST=2 TYP=6

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
06	2695	SGMR	49	GB	1814.8	1815.0	9.8	1800.0			QL=6 ST=2 TYP=6
	4995	SGMR	49	GB	1814.8	1815.0	9.8	1199.0			QL=6 ST=2 TYP=6
	1415	SGMR	49	GB	1814.8	1815.1	9.8	2100.0			QL=6 ST=2 TYP=6
	410	SGMR	49	GB	1814.8	1815.3	9.8	23000.0			QL=6 ST=2 TYP=6
	610	SGMR	49	GB	1814.8	1816.3	9.8	40000.0			QL=6 ST=2 TYP=6
	245	SGMR	49	GB	1814.8	1816.5	9.8	1100.0			QL=6 ST=2 TYP=6
	15400	SGMR	47	GB	1814.8	1817.6	9.8	169.0			QL=6 ST=2 TYP=5
	4995	SGMR	49	GB	1824.6	1824.8	11.4	670.0			QL=6 ST=2 TYP=6
	610	SGMR	49	GB	1824.6	1824.8	11.4	27000.0			QL=6 ST=2 TYP=6
	1415	SGMR	49	GB	1824.6	1824.8	11.4	1199.0			QL=6 ST=2 TYP=6
	2695	SGMR	49	GB	1824.6	1824.8	11.4	1000.0			QL=6 ST=2 TYP=6
	8800	SGMR	47	GB	1824.6	1825.0	11.4	370.0			QL=6 ST=2 TYP=5
	410	SGMR	49	GB	1824.6	1826.0	11.4	28999.0			QL=6 ST=2 TYP=6
	245	SGMR	49	GB	1824.6	1826.8	11.4	510.0			QL=6 ST=2 TYP=6
	8800	SGMR	47	GB	1836.0	1836.1	33.5	210.0			QL=6 ST=2 TYP=5
	2695	SGMR	49	GB	1836.0	1836.1	71.8	640.0			QL=6 ST=2 TYP=6
	4995	SGMR	47	GB	1836.0	1836.1	59.6	410.0			QL=6 ST=2 TYP=5
	1415	SGMR	49	GB	1836.0	1836.1	59.0	1199.0			QL=6 ST=2 TYP=6
	610	SGMR	49	GB	1836.0	1836.1	72.3	31000.0			QL=6 ST=2 TYP=6
	245	SGMR	49	GB	1836.0	1836.8	40.3	600.0			QL=6 ST=2 TYP=6
	410	SGMR	49	GB	1836.0	1845.5	71.8	18000.0			QL=6 ST=2 TYP=6
	15400	SGMR	47	GB	1836.3	1836.5	.2	53.0			QL=6 ST=2 TYP=5
	930	BORD	29	PBI	1840.0	1840.0	15.0	520.0	200.0		
	610	PALE	49	GB	1858.1E	1902.6	14.5D	1300.0			QL=2 ST=3 TYP=6
	410	PALE	49	GB	1859.0E	1902.3	13.6D	1000.0			QL=2 ST=3 TYP=6
	245	PALE	47	GB	1859.1E	1900.6	13.5D	71.0			QL=2 ST=3 TYP=5
	9400	HUAN	1	S	1902.8	1903.3	1.8	18.2	7.6		L
	410	PALE	49	GB	1912.6	1912.6	1.7	1399.0			QL=2 ST=2 TYP=6
	610	PALE	47	GB	1912.6	1912.6	6.5	490.0			QL=2 ST=2 TYP=5
	200	HIRA	27	RF	1921.0E	2010.0	190.0D	15.0	3.0		WR
	610	PALE	47	GB	1924.8	1927.6	4.0	180.0			QL=2 ST=2 TYP=5
	500	HIRA	48	C	1930.0E	2008.0	165.0D	600.0	200.0		SL
	500	HIRA			1930.0E	2136.4		200.0			SL
	2800	OTTA	29	PBI	1930.0	1930.0	90.0	26.0	8.6		
	610	PALE	47	GB	1934.8	1936.8	5.8	200.0			QL=2 ST=2 TYP=5
	610	SGMR	49	GB	2001.1	2003.8	24.0	200.0			QL=6 ST=2 TYP=6
	410	SGMR	47	GB	2001.3	2001.8	23.8	30.0			QL=6 ST=2 TYP=5
	610	PALE	49	GB	2001.3	2007.8	25.3	700.0			QL=2 ST=3 TYP=6
	410	PALE	4	S/F	2007.1	2008.6	2.9	41.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	2016.6	2016.8	.2	11.0			QL=2 ST=2 TYP=3
	610	SGMR	47	GB	2025.1	2025.3	2.0	169.0			QL=6 ST=2 TYP=5
	410	SGMR	8	S	2047.6	2047.8	.2	22.0			QL=6 ST=3 TYP=3
	410	PALE	8	S	2119.6	2121.0	2.0	27.0			QL=2 ST=2 TYP=3
	410	SGMR	20	GRF	2127.6	2135.1	15.4	90.0			QL=6 ST=2 TYP=2
	9400	TYKW	21	GRF	2130.0	2227.0	120.0	10.0	4.0		
	610	SGMR	20	GRF	2130.8	2131.8	12.2	23.0			QL=6 ST=2 TYP=2
	9400	TYKW	5	S	2137.0	2140.0	14.0	4.0	2.0		
	410	SGMR	47	GB	2151.3	2154.5	4.8	89.0			QL=6 ST=2 TYP=5
	410	PALE	4	S/F	2153.5	2154.3	2.3	30.0			QL=2 ST=2 TYP=3
	3750	TYKW	21	GRF	2155.0	2234.0	95.0	2.0	1.0		
	9400	HUAN	2	S/F	2158.1	2159.0	1.6	16.3	6.5		0
	9400	TYKW	5	S	2158.5	2159.0	1.5	14.0	5.0		
	500	HIRA	22	GRF	2229.6	2236.3	60.0	10.0	5.0		ML
	2000	TYKW	28	PRE	2231.0	2232.4	4.0	1.5	.5		
	9400	TYKW	5	S	2235.0	2237.0	15.0	10.0	4.0		
	2000	TYKW	5	S	2235.0	2237.0	4.0	11.0	4.0		
	3750	TYKW	5	S	2235.0	2237.3	20.0	4.0	2.0		
	2800	OTTA	20	GRF	2235.0	2242.0	19.0	4.2	2.4		
	2800	OTTA	1A	S	2236.0	2237.3	2.0	2.4	1.2		
	1000	TYKW	45	C	2236.6	2237.0	.6	37.0	8.0		
	2000	TYKW	30	PBI	2239.0		21.0	4.0	2.0		
	2000	TYKW	31	ABS	2300.0	0100.0	330.0	-8.0	-4.0		
	1000	TYKW	32	ABS	2300.0	0125.0	270.0	-3.0	-1.5		
	410	SGMR	20	GRF	2305.3	2306.3	2.0	22.0			QL=6 ST=2 TYP=2
	2695	SGMR	20	GRF	2307.0	2308.3	3.6	20.0			QL=6 ST=2 TYP=2
	2930	VORO	3	S	2319.0	2320.0	4.0	86.0			
	3750	TYKW	31	ABS	2330.0	0100.0	220.0	-8.0	-4.0		
	9400	TYKW	31	ABS	2330.0	0155.0	300.0	-18.0	-9.0		
	610	LEAR	4	S/F	2333.6	2336.8	4.2	30.0			QL=6 ST=2 TYP=3
	610	PALE	4	S/F	2333.6	2337.0	4.7	20.0			QL=6 ST=2 TYP=3

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
06	610	LEAR	47	GB	2339.1	2348.8	16.4	87.0			QL=6 ST=2 TYP=5
	610	PALE	47	GB	2340.5	2343.3	11.8	57.0			QL=6 ST=2 TYP=5
07	245	LEAR	8	S	0007.0	0007.1	.1	28.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0052.3	0052.3	.2	35.0			QL=6 ST=2 TYP=3
	1000	TYKW	45	C	0105.7	0105.9	.5	12.0	3.0		
	610	LEAR	47	GB	0105.8	0106.0	.3	55.0			QL=6 ST=2 TYP=5
	610	PALE	47	GB	0105.8	0106.0	3.7	54.0			QL=6 ST=2 TYP=5
	1000	TYKW	45	C	0108.2	0108.5	1.3	26.0	4.0		
	9400	TYKW	5	S	0111.0	0112.5	5.0	4.0	1.5		
	8800	PALE	8	S	0112.1	0112.5	2.0	21.0			QL=6 ST=3 TYP=3
	245	LEAR	8	S	0115.8	0116.0	.3	18.0			QL=6 ST=2 TYP=3
	500	HIRA			0158.9	0202.0		32.0			SL
	500	HIRA	46	C	0158.9	0208.0	14.0	38.0	24.0		SL
	410	LEAR	4	S/F	0200.1	0203.1	5.4	13.0			QL=6 ST=2 TYP=3
	410	LEAR	4	S/F	0207.1	0209.1	4.0	20.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0212.8	0213.0	.3	15.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0243.6	0243.6	.2	15.0			QL=6 ST=2 TYP=3
	2950	GORK	1	S	0315.9	0318.0	5.1	3.0	1.5		
	9100	GORK	21	GRF	0317.8		498.0D				
	9400	TYKW	5	S	0318.5	0319.0	1.5	5.0	1.5		
	9400	TYKW	5	S	0322.5	0323.5	2.5	8.0	2.0		
	1000	TYKW	42	SER	0339.0	0341.4	3.0	2.0	.5		
	1000	TYKW	42	SER	0344.0	0346.5	15.0	10.0	1.0		
	1000	TYKW			0344.0	0349.3		8.0			
	1000	TYKW			0344.0	0357.4		9.0			
	2950	GORK	20	GRF	0412.4	0526.7	146.0	6.2	3.0		
	3750	TYKW	20	GRF	0420.0	0425.7	30.0	3.0	1.0		
	6100	KISV	3	S	0458.8	0459.6	1.5	4.0			
	3750	TYKW	20	GRF	0510.0	0514.0	30.0	2.0	1.0		
	2000	TYKW	20	GRF	0510.0	0515.0	60.0	2.0	1.0		
	610	LEAR	8	S	0523.0	0523.5	.6	21.0			QL=6 ST=2 TYP=3
	1000	TYKW	5	S	0523.3	0523.4	.5	5.0	1.0		
	1000	TYKW	5	S	0525.5	0525.6	.5	2.0	.7		
	808	ONDR	8	S	0621.8	0622.2	.8	20.0			
	33	UPIC	45	C	0655.9		4.6				
	808	ONDR	8	S	0658.6	0658.6	.1	8.0			
	2000	TYKW	21	GRF	0710.0	0718.0	60.0	3.0	1.0		
	3750	TYKW	21	GRF	0710.0	0720.0	60.0	2.0	1.0		
	2950	GORK	21	GRF	0716.8	0836.0	292.0D	12.5			
	2000	TYKW	8	S	0734.1	0734.2	.3	5.0	1.5		
	808	ONDR	8	S	0736.4	0736.4	.1	22.0			
	3750	TYKW	5	S	0747.0	0748.5	10.0	2.0	.7		
	245	LEAR	8	S	0756.0	0756.1	.1	23.0			QL=6 ST=2 TYP=3
	6100	KISV	28	PRE	0815.0	0824.0	9.0	5.0			
	2000	TYKW	45	C	0824.0	0827.0	8.0	208.0	43.0		
	9400	TYKW	45	C	0824.0	0827.0	8.0	360.0	100.0		
	3750	TYKW	45	C	0824.0	0827.5	8.0	238.0	60.0		
	8800	ATHN	47	GB	0824.0	0826.5	10.1	320.0			QL=6 ST=2 TYP=5
	8400	BERN	41	F	0824.0	0826.9	50.0	464.0			
	9395	PEKG	45	C	0824.0	0827.0	25.0	333.0	58.4		
	3100	CRIM	3	S	0824.0	0827.0	6.0	211.0	71.0		
	6100	KISV	45	C	0824.0	0827.1	6.0	245.0			
	6100	KISV			0824.0	0827.4		236.0			
	430	KRAK	45	C	0824.1	0825.2	10.3	650.0D	85.0		
	810	KRAK	45	C	0824.1	0827.2	9.3	600.0	50.0		
	536	ONDR	42	SER	0824.1	0828.0U	22.0	145.0	31.0		
	430	KRAK			0824.1	0831.8		650.0D			
	810	KRAK			0824.1	0832.8		63.0			
	2695	ATHN	47	GB	0824.3	0826.5	4.7	280.0			QL=6 ST=2 TYP=5
	4995	ATHN	47	GB	0824.3	0826.6	9.8	330.0			QL=6 ST=2 TYP=5
	11800	BERN	41	F	0824.5	0826.8	20.0D	365.0			
	19600	BERN	41	F	0824.5	0826.8	50.0D	196.0			
	8800	MANI	47	GB	0824.6	0827.0	5.9	579.1	193.0		
	260	ONDR	42	SER	0824.6	0827.0U	20.0				
	2695	MANI	4	S/F	0824.6	0827.0	5.4	225.5	75.2		
	4995	MANI	4	S/F	0824.6	0827.2	6.9	432.3	144.1		
	15000	KISV			0824.8	0826.3		253.0			
	15000	KISV	45	C	0824.8	0826.8	5.0	440.0			
	9100	GORK	4	S/F	0824.8	0826.9	6.6	255.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
07	8800	LEAR	47	GB	0824.8	0827.0	17.3	400.0			QL=6 ST=2 TYP=5
	1000	TYKW	45	C	0825.0	0828.1	10.0	350.0	50.0		
	2950	GORK	3	S	0825.0	0826.5	2.3	202.0			
	2650	DWIN	4	S/F	0825.0	0827.0	5.0	210.0	100.0		
	2840	PEKG	3	S	0825.0	0827.0	20.0	313.0			
	4995	LEAR	47	GB	0825.0	0827.3	17.3	330.0			QL=6 ST=2 TYP=5
	930	BORD	45	C	0825.0	0838.3	16.0	840.0	300.0		
	1415	ATHN	47	GB	0825.1	0826.5	3.9	160.0			QL=6 ST=2 TYP=5
	15400	LEAR	47	GB	0825.3	0826.8	14.8	260.0			QL=6 ST=2 TYP=5
	650	GORK	48	C	0825.4	0828.3	9.3	280.0			
	650	GORK			0825.4	0834.0U		70.0D			
	200	HIRA	46	C	0825.5	0826.8	9.0	900.0	148.0		WL
	3000	IZMI	5	S	0825.5	0827.0	4.0	204.0	100.0		
	950	GORK	46	C	0825.5	0828.0	9.0	345.0			
	500	HIRA			0825.5	0828.2		140.0			SR
	200	HIRA			0825.5	0831.0		130.0			WL
	500	HIRA	46	C	0825.5	0833.9	8.6	250.0	40.0		SL
	950	GORK			0825.5	0834.0		67.0			
	200	HIRA			0825.5	0834.2		42.0			WL
	100	HIRA	48	C	0825.6		9.3	10000.0D	1360.0D		
	2695	LEAR	47	GB	0825.6	0826.8	15.0	230.0			QL=6 ST=2 TYP=5
	808	ONDR	42	SER	0825.6	0827.8	15.7	429.0	69.0		
	204	IZMI	46	C	0825.8	0826.8	3.0		250.0		
	204	IZMI	41	F	0825.8	0826.8	9.0	700.0			
	1415	MANI	4	S/F	0825.8	0827.0	5.2	158.7	52.9		
	1415	LEAR	47	GB	0825.8	0827.1	14.5	180.0			QL=6 ST=2 TYP=5
	606	MANI	4	S/F	0825.8	0828.3	6.2	362.4	120.8		
	245	LEAR	49	GB	0826.0	0827.5	8.8	970.0			QL=6 ST=2 TYP=6
	410	LEAR	49	GB	0826.1	0826.6	13.9	400.0			QL=6 ST=2 TYP=6
	610	LEAR	49	GB	0826.1	0828.5	13.7	530.0			QL=6 ST=2 TYP=6
	15000	KISV	29	PBI	0829.8	0830.0	40.0	75.0			
	6100	KISV	29	PBI	0830.0	0830.0	40.0	41.0			
	3100	CRIM	30	PBI	0830.0	0830.0	47.0	16.0	5.0		
	9400	TYKW	30	PBI	0832.0		45.0	35.0	14.0		
	2000	TYKW	30	PBI	0832.0		40.0	6.0	3.0		
	3750	TYKW	30	PBI	0832.0		40.0	12.0	6.0		
	1000	TYKW	45	C	0838.0	0839.1	5.0	26.0	2.0		
	3750	TYKW	45	C	0838.0	0839.3	6.0	40.0	8.0		
	2650	DWIN	2	S/F	0838.0	0838.0	5.0	100.0	40.0		
	3100	CRIM	45	C	0838.0	0839.0	5.0	42.0	14.0		
	3100	CRIM			0838.0	0841.8		16.0			
	4995	ATHN	47	GB	0838.3	0842.5	10.3	68.0			QL=6 ST=2 TYP=5
	2950	GORK	4	S/F	0838.4	0839.0	2.0	35.0			
	2000	TYKW	45	C	0838.5	0839.2	2.0	17.0	8.0		
	2695	MANI	4	S/F	0838.7	0838.9	4.3	37.8	12.6		
	6100	KISV	45	C	0838.7	0839.3	1.5	70.0			
	9100	GORK	46	C	0838.7	0839.3	2.0	84.0			
	6100	KISV			0838.7	0839.7		46.0			
	9100	GORK			0838.7	0839.8		45.0			
	9400	TYKW	45	C	0839.0	0839.3	5.0	80.0	10.0		
	8800	MANI	4	S/F	0839.0	0840.3	4.5	135.4	45.1		
	4995	MANI	4	S/F	0839.0	0840.3	4.5	96.3	32.1		
	100	HIRA	46	C	0840.0	0843.3	8.4	300.0	120.0		WL
	2950	GORK	1	S	0841.5	0841.8	1.1	10.0			
	9100	GORK	1	S	0841.5	0841.8	1.4	19.0	10.0		
	6100	KISV	4	S/F	0841.5	0841.8	1.0	24.0			
	15000	KISV	4	S/F	0845.0	0845.6	1.5	62.0			
	9100	GORK	1	S	0850.9	0851.4	1.8	15.0	8.0		
	3100	CRIM	21	GRF	0921.0	0930.0	109.0	8.0	3.0		
	4995	ATHN	4	S/F	0926.8	0928.6	3.2	22.0			QL=6 ST=2 TYP=3
	6100	KISV	21	GRF	0927.5	0928.6	7.0	22.0			
	9100	GORK	4	S/F	0927.8	0929.2	2.2	30.0	15.0		
	2650	DWIN	2	S/F	0928.0	0928.0	1.0	15.0	5.0		
	2695	ATHN	4	S/F	0928.0	0928.6	2.5	24.0			QL=6 ST=2 TYP=3
	8800	ATHN	4	S/F	0928.0	0928.6	3.3	21.0			QL=6 ST=2 TYP=3
	3100	CRIM	1	S	0928.0	0928.8	2.0	6.0	2.0		
	2950	GORK	1	S	0928.1	0928.8	1.3	12.5			
	8800	ATHN	4	S/F	1011.3	1011.8	3.7	11.0			QL=6 ST=2 TYP=3
	6100	KISV	2	S/F	1011.3	1011.8	1.0	12.0			
	260	ONDR	42	SER	1011.5		72.0				

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
07	4995	ATHN	4	S/F	1011.5	1011.8	3.5	5.0			QL=6 ST=2 TYP=3
	9100	GORK	2	S/F	1030.0	1031.1	2.1	9.0	4.0		
	536	ONDR	42	SER	1040.0		11.0	24.0			
	11800	BERN	3	S	1140.0	1141.0	2.0	53.0			
	8400	BERN	3	S	1140.0	1141.1	2.0	50.0			
	8800	ATHN	4	S/F	1140.1	1140.8	6.2	31.0			QL=6 ST=2 TYP=3
	9100	GORK	3	S	1140.1	1141.1	2.5	32.0	16.0		
	9400	HUAN	4	S/F	1140.1	1141.3	2.2	33.8	11.3		0
	4995	ATHN	4	S/F	1140.6	1141.1	3.7	2.0			QL=6 ST=2 TYP=3
	2950	GORK	1	S	1140.7	1141.1	.7	2.6	1.3		
	2800	OTTA	1	S	1140.8	1141.0	1.0	4.8			
	2800	OTTA	20	GRF	1235.0	1312.0	205.0	18.4	6.6		
	8400	BERN	20	GRF	1240.0	1344.6	130.0	139.0			
	9400	HUAN	22	GRF	1241.0	1345.5	120.7	54.5	28.4		0
	4995	ATHN	20	GRF	1300.3	1307.3	54.3	16.0			QL=6 ST=2 TYP=2
	8800	ATHN	47	GB	1300.3	1307.3	54.3	31.0			QL=6 ST=2 TYP=5
	33	UPIC	42	SER	1416.5	1447.0	31.2				
	8400	BERN	3	S	1606.8	1607.1	4.0	123.0			
	35000	BERN	47	GB	1606.8	1607.1	4.0	1067.0			
	15400	SGMR	49	GB	1606.8	1607.1	4.0	610.0			QL=6 ST=2 TYP=6
	19600	BERN	47	GB	1606.8	1607.1	4.0	1435.0			
	11800	BERN	47	GB	1606.8	1607.1	4.0	513.0			
	9400	HUAN	30	PBI	1608.3	1608.3	15.2	13.1	5.4		0
	9400	HUAN	1	S	1609.5	1610.3	1.2	12.2	4.5		0
	930	BORD	8	S	1616.4	1616.4	.1	25.0	1.0		
	9400	HUAN	23	GRF	1631.8	1651.4	80.4	47.0	16.4		R
	2800	OTTA	21	GRF	1635.0	1650.0	70.0	5.0	2.3		
	8800	ATHN	4	S/F	1643.6	1646.1	12.7	31.0			QL=5 ST=2 TYP=3
	11800	BERN	21	GRF	1644.0	1651.1	45.0	51.0			
	8400	BERN	21	GRF	1644.0	1653.1	45.0	56.0			
	19600	BERN	20	GRF	1644.0	1653.8	45.0	31.0			
	4995	ATHN	4	S/F	1644.6	1646.0	11.7	19.0			QL=5 ST=2 TYP=3
	9400	HUAN	3	S	1644.7	1646.0	2.7	37.6	22.5		R
	2800	OTTA	1	S	1645.0	1646.0	3.0	6.4	2.2		
	15400	SGMR	20	GRF	1645.8	1651.1	10.0	50.0			QL=3 ST=2 TYP=2
	1415	ATHN	4	S/F	1646.0	1652.3	10.3	27.0			QL=5 ST=2 TYP=3
	2800	OTTA	1	S	1700.0	1701.0	2.0	3.6	1.8		
	930	BORD	46	C	1700.0	1701.0	1.3	42.0	5.0		
	9400	HUAN	1	S	1700.6	1701.6	2.2	15.0	3.8		R
	2800	OTTA	1	S	1732.0	1733.0	3.0	8.0	3.6		
	9400	HUAN	3	S	1807.8	1809.1	2.8	45.1	17.2		0
	4995	PALE	8	S	1808.8	1809.1	.5	28.0			QL=6 ST=2 TYP=3
	8800	PALE	47	GB	1808.8	1809.1	.8	63.0			QL=6 ST=2 TYP=5
	15400	PALE	8	S	1809.1	1810.1	1.0	24.0			QL=6 ST=2 TYP=3
	9400	HUAN	29	PBI	1810.6	1810.6	33.0	7.5	6.0		0
	410	SGMR	8	S	1842.8	1842.8	.3	20.0			QL=6 ST=2 TYP=3
	610	SGMR	8	S	1842.8	1843.1	.3	30.0			QL=6 ST=2 TYP=3
	2000	TYKW	21	GRF	2112.0	2138.0	130.0	4.0	2.0		
	3750	TYKW	45	C	2114.0	2119.1	13.0	29.0	11.0		
	9400	TYKW	45	C	2114.0	2120.0	13.0	16.0	7.0		
	2800	OTTA	21	GRF	2114.0	2138.0	135.0	6.0	3.0		
	2000	TYKW	45	C	2116.5	2119.3	10.0	10.0	3.0		
	2800	OTTA	45	C	2117.5	2119.1	10.5	19.4	5.8		
	4995	PALE	4	S/F	2117.8	2119.6	3.0	38.0			QL=6 ST=2 TYP=3
	15400	PALE	4	S/F	2118.0	2119.8	10.6	30.0			QL=6 ST=2 TYP=3
	2695	PALE	8	S	2118.5	2119.6	1.3	20.0			QL=6 ST=2 TYP=3
	8800	PALE	47	GB	2118.8	2119.6	3.8	24.0			QL=6 ST=2 TYP=5
	3750	TYKW	30	PBI	2127.0		120.0	6.0	3.0		
	9400	TYKW	29	PBI	2127.0		15.0	4.0	2.0		
	3750	TYKW	20	GRF	2155.0	2205.0	40.0	2.0	1.0		
	9400	TYKW	21	GRF	2155.0	2213.0	80.0	10.0	4.0		
	9400	TYKW	5	S	2232.0	2233.0	5.0	3.0	1.0		
	3750	TYKW	5	S	2243.0	2247.0	15.0	1.5	.7		
	1000	TYKW	45	C	2324.0	2325.1	2.0	3.0	1.0		
	410	LEAR	8	S	2324.1	2324.3	1.2	48.0			QL=6 ST=2 TYP=3
	500	HIRA	46	C	2324.3	2324.4	1.0	40.0	10.0		ML
	3750	TYKW	5	S	2338.0	2338.6	1.5	2.0	.5		
	410	LEAR	8	S	2338.3	2338.6	.3	31.0			QL=6 ST=2 TYP=3
	3750	TYKW	21	GRF	2342.0	2351.0	80.0	4.0	1.5		
08	33	UPIC	43	NS	1050.0		460.0D				

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
08	208	VORO	44	NS	2100.0E		180.0D		9.0		
	9400	TYKW	20	GRF	0010.0	0030.0	50.0	4.0	2.0		
	3750	TYKW	20	GRF	0020.0	0032.0	35.0	4.0	2.0		
	9400	TYKW	21	GRF	0110.0	0200.0	220.0	20.0	9.0		
	3750	TYKW	21	GRF	0115.0	0154.0	210.0	16.0	7.0		
	2695	PENT	20	GRF	0120.0	0145.0	30.0D	9.6			
	2000	TYKW	21	GRF	0130.0	0205.0	185.0	8.0	4.0		
	1000	TYKW	21	GRF	0130.0	0210.0	175.0	2.0	1.0		
	3750	TYKW	45	C	0257.0	0259.0	13.0	14.0	3.5D		
	3750	TYKW			0257.0	0303.0U		14.0D			
	2000	TYKW	28	PRE	0257.5	0259.0	2.5	4.0	2.0		
	9400	TYKW	28	PRE	0258.0	0259.0	2.0	13.0	4.0		
	1000	TYKW	5	S	0258.6	0259.2	1.4	9.0	3.0		
	4995	PALE	47	GB	0258.8	0300.6	5.2	169.0			QL=6 ST=2 TYP=5
	4995	MANI	3	S	0258.8	0301.2	4.2	166.4	55.5		
	2695	MANI	3	S	0259.0	0301.2	5.5	138.8	46.3		
	9400	TYKW	5	S	0300.0	0300.7	3.0	125.0	30.0		
	2000	TYKW	45	C	0300.0	0301.0	5.0	52.0	14.0		
	17000	NOBE	1	S	0300.0	0300.9	3.0	23.0			0
	2695	LEAR	47	GB	0300.1	0300.6	2.2	130.0			QL=6 ST=2 TYP=5
	2695	PALE	47	GB	0300.1	0300.6	2.2	119.0			QL=6 ST=2 TYP=5
	4995	LEAR	47	GB	0300.1	0300.6	1.9	130.0			QL=3 ST=2 TYP=5
	8800	LEAR	47	GB	0300.1	0300.6	1.2	139.0			QL=3 ST=2 TYP=5
	1415	MANI	3	S	0300.2	0301.2	2.3	29.6	9.9		
	8800	MANI	3	S	0300.2	0301.2	2.3	148.8	49.6		
	1415	PALE	8	S	0300.3	0300.8	.8	26.0			QL=6 ST=2 TYP=3
	1415	LEAR	8	S	0300.3	0300.8	.8	23.0			QL=6 ST=2 TYP=3
	8800	PALE	47	GB	0300.5	0300.6	.3	200.0			QL=6 ST=2 TYP=5
	15400	PALE	8	S	0300.5	0300.6	.3	41.0			QL=6 ST=2 TYP=3
	15400	LEAR	4	S/F	0300.6	0300.6	148.0	34.0			QL=3 ST=2 TYP=3
	9400	TYKW	29	PBI	0303.0		25.0	8.0	4.0		
	2000	TYKW	29	PBI	0305.0		80.0	4.0	2.0D		
	3750	TYKW	29	PBI	0310.0		80.0	6.0	3.0		
	9100	GORK	23	GRF	0324.0E		120.0D				
	950	GORK	20	GRF	0326.0E	0506.4	480.0D	10.5			
	2950	GORK	20	GRF	0327.0E	0330.0	120.0D	18.3			
	9400	TYKW	5	S	0348.5	0349.0	1.5	14.0	4.0		
	9100	GORK	1	S	0348.7	0349.1	1.3	11.0			
	9395	PEKG	3	S	0425.0	0427.9	11.0	46.0	7.7		
	9400	TYKW	5	S	0427.0	0427.7	3.0	48.0	20.0		
	8800	LEAR	4	S/F	0427.1	0427.6	4.9	40.0			QL=3 ST=2 TYP=3
	9100	GORK	3	S	0427.1	0427.8	2.7	30.0	15.0		
	17000	NOBE	3	S	0427.2	0427.8	4.0	103.0			L
	15400	LEAR	47	GB	0427.3	0427.6	2.0	119.0			QL=3 ST=2 TYP=5
	15000	KISV	4	S/F	0427.3	0427.8	3.0	135.0			
	6100	KISV	3	S	0427.4	0427.8	2.0	8.0			
	9400	TYKW	29	PBI	0430.0		7.0	6.0	3.0		
	2000	TYKW	31	ABS	0435.0	0500.0	60.0	-3.0	-1.5		
	1000	TYKW	45	C	0451.4	0452.7	5.0	7.0	1.0		
	1000	TYKW	5	S	0514.0	0514.6	1.0	5.0	1.0		
	245	LEAR	47	GB	0514.3	0514.6	.5	200.0			QL=6 ST=2 TYP=5
	1415	LEAR	8	S	0514.5	0514.6	.1	20.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0514.6	0514.8	.2	8.0			QL=6 ST=2 TYP=3
	9400	TYKW	21	GRF	0530.0	0603.0U	120.0	14.0U	7.0D		
	3750	TYKW	45	C	0535.0	0550.8	35.0	33.0	8.0D		
	15000	KISV	2	S/F	0539.6	0540.6		30.0U			
	9400	TYKW	28	PRE	0540.0	0540.5	10.0	14.0	5.0		
	6100	KISV	3	S	0540.0U	0540.7		14.0U			
	2000	TYKW	21	GRF	0540.0	0635.0	120.0	4.0	2.5		
	11800	BERN	3	S	0540.0	0550.8	15.0	77.0			
	8400	BERN	3	S	0540.0	0550.9	15.0	86.0			
	9395	PEKG	3	S	0545.0	0551.0	11.0	59.0	5.4		
	610	LEAR	8	S	0545.3	0545.5	.3	5.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0545.3	0545.5	.3	8.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0545.3	0545.5	.3	23.0			QL=6 ST=2 TYP=3
	2840	PEKG	3	S	0549.0	0550.8	4.0	14.6	4.6		
	3000	IZMI	5	S	0549.2	0550.0	2.5	18.0	9.0		
	2695	LEAR	4	S/F	0549.8	0550.8	6.8	19.0			QL=6 ST=2 TYP=3
	1000	TYKW	5	S	0550.0	0550.4	.8	7.0	2.0		
	2000	TYKW	5	S	0550.0	0550.6	3.0	4.0	1.5		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
08	9400	TYKW	5	S	0550.0	0550.7	3.0	67.0	15.0		
	19600	BERN	3	S	0550.0	0550.8	3.0U	73.0			
	4995	LEAR	4	S/F	0550.0	0550.8	6.6	39.0			QL=6 ST=2 TYP=3
	2695	MANI	3	S	0550.0	0551.0	2.5	15.6	5.2		
	8800	LEAR	47	GB	0550.1	0550.8	2.5	69.0			QL=6 ST=2 TYP=5
	15000	KISV	4	S/F	0550.1	0550.9	2.5	60.0U			
	8800	ATHN	47	GB	0550.1	0551.0	3.0	68.0			QL=6 ST=2 TYP=5
	2695	ATHN	8	S	0550.1	0551.0	2.0	6.0			QL=6 ST=2 TYP=3
	4995	ATHN	4	S/F	0550.1	0551.0	4.5	29.0			QL=6 ST=2 TYP=3
	4995	MANI	3	S	0550.2	0551.0	2.8	54.6	18.2		
	8800	MANI	3	S	0550.2	0551.0	1.8	80.8	26.9		
	245	LEAR	47	GB	0550.3	0550.3	.2	300.0			QL=6 ST=2 TYP=5
	410	LEAR	47	GB	0550.3	0550.3	.2	80.0			QL=6 ST=2 TYP=5
	15400	LEAR	8	S	0550.6	0550.8	.2	31.0			QL=3 ST=2 TYP=3
	9400	TYKW	29	PBI	0553.0		6.0	4.0	2.0		
	2950	GORK	21	GRF	0607.0	0630.0	330.0	16.0			
	9100	GORK	21	GRF	0609.0E		350.0D				
	3750	TYKW	30	PBI	0610.0		90.0	7.0	3.0		
	260	ONDR	8	S	0610.7	0610.8	.3	10.0			
	6100	KISV	20	GRF	0620.0	0631.5	30.0	9.0			
	9400	TYKW	20	GRF	0624.0	0632.0	40.0	13.0	5.0		
	3750	TYKW	20	GRF	0625.0	0632.0	60.0	6.0	2.5		
	9400	TYKW	5	S	0718.4	0719.0	5.0	12.0	4.0		
	9100	GORK	1	S	0719.2	0719.6	1.9	8.0	4.0		
	3750	TYKW	45	C	0738.0	0754.2	22.0D	10.0	4.0D		
	260	ONDR	40	F	0742.0	0827.0	52.0	13.0			
	9400	TYKW	20	GRF	0755.0	0808.0	35.0	5.0	2.0		
	245	LEAR	8	S	0823.5	0824.3	1.0	41.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0824.0	0824.1	.5	33.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0826.1	0826.3	.2	21.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0826.1	0826.6	.7	36.0			QL=6 ST=2 TYP=3
	245	LEAR	47	GB	0826.1	0826.6	.7	80.0			QL=6 ST=2 TYP=5
	2000	TYKW	20	GRF	0831.0	0854.0	35.0D	6.0	2.5D		
	9100	GORK	1	S	0844.2	0844.6	.9	9.0	4.5		
	245	LEAR	8	S	0844.6	0845.0	.5	32.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0844.6	0845.0	.5	11.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0844.6	0845.0	.5	42.0			QL=6 ST=2 TYP=3
	1415	LEAR	8	S	0844.6	0845.0	.5	13.0			QL=6 ST=2 TYP=3
	2950	GORK	40	F	0849.0	0849.9	8.0	6.2			
	650	GORK	46	C	0850.0	0851.2	5.9	4.0			
	650	GORK			0850.0	0854.0		4.0			
	6100	KISV	20	GRF	0853.6	0854.5	4.0	5.0			
	430	KRAK	8	S	0854.4	0854.4	.8	16.0			
	430	KRAK	8	S	0900.7	0900.8	.2	15.0			
	15000	KISV	21	GRF	0908.5	0914.5	15.0	26.0			
	260	ONDR	8	S	0910.7	0910.7	.2	30.0			
	6100	KISV	2	S/F	0914.4	0914.6	1.0	4.0			
	260	ONDR	40	F	0942.0	0949.5	72.0	28.0			
	430	KRAK	8	S	0953.3	0953.3	.2	25.0			
	650	GORK	1	S	1003.0	1003.4	.8	1.0			
	6100	KISV	2	S/F	1003.0	1003.6	2.0	11.0			
	2950	GORK	1	S	1003.2	1003.3	17.0	6.3			
	204	IZMI	4	S/F	1045.2	1045.5	.5	43.0	23.0		
	260	ONDR	4	S/F	1212.1	1214.3	3.2	78.0			
	536	ONDR	4	S/F	1212.3	1214.5	4.3	38.0	14.0		
	410	SGMR	47	GB	1212.8	1213.0	2.0	99.0			QL=6 ST=2 TYP=5
	430	KRAK	4	S/F	1212.8	1213.1	3.1	150.0	8.0		
	2695	SGMR	4	S/F	1212.8	1214.3	3.0	13.0			QL=6 ST=2 TYP=3
	430	KRAK			1212.8	1214.4		140.0			
	810	KRAK	4	S/F	1212.8	1214.4	2.6	55.0	7.0		
	930	BORD	45	C	1213.0	1214.6	3.0	39.0	4.0		
	9400	HUAN	1	S	1213.4	1214.3	2.4	18.5	6.7		0
	1415	SGMR	8	S	1213.6	1214.1	1.5	18.0			QL=6 ST=2 TYP=3
	4995	SGMR	8	S	1213.6	1214.3	1.0	11.0			QL=6 ST=2 TYP=3
	245	SGMR	47	GB	1213.8	1214.3	.8	110.0			QL=6 ST=3 TYP=5
	8800	SGMR	8	S	1213.8	1214.3	.8	30.0			QL=6 ST=2 TYP=3
	8400	BERN	3	S	1214.0	1214.4	1.0	82.0			
	8800	ATHN	8	S	1214.0	1214.5	2.0	11.0			QL=5 ST=2 TYP=3
	11800	BERN	3	S	1214.0	1214.5	1.0	47.0			
	610	SGMR	47	GB	1214.0	1214.5	.8	90.0			QL=6 ST=2 TYP=5

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
08	1415	ATHN	8	S	1214.0	1214.5	2.0	8.0			QL=5 ST=2 TYP=3
	4995	ATHN	8	S	1214.0	1214.5	2.0	16.0			QL=5 ST=2 TYP=3
	2695	ATHN	8	S	1214.0	1214.5	2.0	9.0			QL=5 ST=2 TYP=3
	2800	OTTA	1	S	1214.0	1214.6	1.5	9.8	4.8		
	808	ONDR	8	S	1214.4	1214.9	1.4	21.0			
	9400	HUAN	20	GRF	1244.2	1254.5	17.1	6.2	2.9		0
	9400	HUAN	20	GRF	1335.3	1346.4	22.2	7.2	2.7		0
	2800	OTTA	20	GRF	1445.0	1453.0	15.0	4.0	1.8		
	2800	OTTA	20	GRF	1530.0	1555.0	80.0	44.0	14.8		
	2650	DWIN		GRF	1530.0	1555.0	30.0	40.0	20.0		
	930	BORD	20	GRF	1536.0	1551.0	44.0	41.0	12.0		
	1415	SGMR	20	GRF	1543.0	1547.3	25.0D	54.0			QL=6 ST=3 TYP=2
	2695	SGMR	20	GRF	1544.6	1547.8	23.4D	31.0			QL=6 ST=3 TYP=2
	245	SGMR	20	GRF	1544.8	1546.3	23.2D	39.0			QL=6 ST=3 TYP=2
	610	SGMR	20	GRF	1544.8	1546.3	23.2D	20.0			QL=6 ST=3 TYP=2
	410	SGMR	20	GRF	1545.6	1545.8	22.4D	16.0			QL=6 ST=3 TYP=2
	9400	HUAN	20	GRF	1609.4	1613.4	14.2	10.3	4.1		0
	9400	HUAN	2	S/F	1752.4	1753.5	2.7	8.2	5.8		0
	2650	DWIN	1	S	1800.0	1802.0	3.0	55.0	20.0		
	930	BORD	45	C	1800.5	1802.5	4.5	62.0	15.0		
	2800	OTTA	3	S	1801.0	1802.3	3.0	68.0	023.0		
	1415	PALE	8	S	1801.3	1802.5	2.0	48.0			QL=6 ST=2 TYP=3
	9400	HUAN	4	S/F	1801.4	1802.6	3.0	20.6	11.6		0
	245	PALE	47	GB	1801.5	1802.1	1.3	219.0			QL=6 ST=2 TYP=5
	245	SGMR	8	S	1801.5	1802.1	1.1	169.0			QL=6 ST=2 TYP=3
	2695	SGMR	47	GB	1801.5	1802.3	2.6	60.0			QL=6 ST=2 TYP=5
	4995	PALE	47	GB	1801.6	1802.3	1.5	57.0			QL=6 ST=2 TYP=5
	4995	SGMR	47	GB	1801.6	1802.3	2.0	54.0			QL=6 ST=2 TYP=5
	410	PALE	47	GB	1801.8	1802.0	1.3	280.0			QL=6 ST=2 TYP=5
	410	SGMR	47	GB	1801.8	1802.0	1.3	230.0			QL=6 ST=2 TYP=5
	610	PALE	47	GB	1801.8	1802.3	1.7	160.0			QL=6 ST=2 TYP=5
	610	SGMR	47	GB	1801.8	1802.3	2.3	169.0			QL=6 ST=2 TYP=5
	1415	SGMR	4	S/F	1801.8	1802.5	2.8	40.0			QL=6 ST=2 TYP=3
	8800	PALE	8	S	1802.0	1802.3	.8	30.0			QL=6 ST=2 TYP=3
	8800	SGMR	8	S	1802.0	1802.5	1.8	25.0			QL=6 ST=2 TYP=3
	15400	PALE	8	S	1802.1	1802.3	.2	18.0			QL=6 ST=2 TYP=3
	15400	SGMR	8	S	1802.1	1802.3	1.2	26.0			QL=6 ST=2 TYP=3
	2695	PALE	8	S	1802.1	1802.3	.4	20.0			QL=6 ST=2 TYP=3
	2800	OTTA	29	PBI	1804.0	1804.0	22.0	5.0	2.7		
	9400	HUAN	29	PBI	1804.4	1804.4	16.7	9.3	5.4		0
	2800	OTTA	31	ABS	1826.0	1835.0	30.0	-6.6	-3.3		
	500	HIRA	41	F	1956.3	2001.2	12.6	700.0			MLWR
	610	PALE	49	GB	1958.1	1958.5	.5	600.0			QL=6 ST=2 TYP=6
	2695	PALE	47	GB	1958.8	2000.3	5.2	16.0			QL=6 ST=2 TYP=5
	2800	OTTA	28	PRE	1959.0	2000.9	2.2	11.8			
	1415	SGMR	47	GB	1959.8	2002.1	4.8	219.0			QL=6 ST=2 TYP=5
	2695	SGMR	47	GB	2000.0	2002.1	4.3	119.0			QL=6 ST=2 TYP=5
	4995	SGMR	47	GB	2000.3	2002.3	12.5	180.0			QL=6 ST=2 TYP=5
	610	SGMR	47	GB	2001.1	2001.3	4.9	119.0			QL=6 ST=2 TYP=5
	1415	PALE	47	GB	2001.1	2002.1	2.9	189.0			QL=6 ST=2 TYP=5
	2695	PENT	4	S/F	2001.2	2002.2	3.8	133.0	44.0		
	4995	PALE	47	GB	2001.3	2002.3	2.7	139.0			QL=6 ST=2 TYP=5
	9400	HUAN	4	S/F	2001.4	2002.3	2.9	133.9	62.9		R
	8800	PALE	47	GB	2001.8	2002.1	1.5	119.0			QL=6 ST=2 TYP=5
	8800	SGMR	47	GB	2001.8	2002.1	2.2	119.0			QL=6 ST=2 TYP=5
	15400	PALE	49	GB	2001.8	2004.0	2.3	48.0			QL=6 ST=2 TYP=6
	410	PALE	47	GB	2002.0	2002.1	.5	110.0			QL=6 ST=2 TYP=5
	410	SGMR	47	GB	2002.0	2002.1	1.3	70.0			QL=6 ST=2 TYP=5
	15400	SGMR	8	S	2002.1	2002.1	.2	39.0			QL=6 ST=2 TYP=3
	9400	HUAN	30	PBI	2004.3	2004.3	14.7	8.2	5.2		R
	2800	OTTA	30	PBI	2005.0	2005.0	135.0	6.6	2.8		
	200	HIRA	27	RF	2006.3	2012.6	167.0	82.0	10.0		WL
	2695	PENT	3	S	2007.0	2009.2	6.5	30.0	7.8		
	245	SGMR	4	S/F	2007.1	2009.3	11.0	180.0			QL=6 ST=2 TYP=3
	245	PALE	47	GB	2007.3	2009.3	8.0	200.0			QL=6 ST=2 TYP=5
	9400	HUAN	2	S/F	2007.4	2009.2	3.1	16.5	10.3		0
	2695	PALE	4	S/F	2007.5	2009.1	2.8	33.0			QL=6 ST=2 TYP=3
	4995	PALE	4	S/F	2007.6	2009.1	2.5	43.0			QL=6 ST=2 TYP=3
	1415	PALE	8	S	2008.8	2009.0	.2	17.0			QL=6 ST=2 TYP=3
	15400	PALE	8	S	2008.8	2009.1	1.3	34.0			QL=6 ST=2 TYP=3

SOLAR RADIO EMISSION
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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
08	410	PALE	8	S	2008.8	2009.3	1.3	36.0			QL=6 ST=2 TYP=3
	1000	TYKW	45	C	2053.0	2055.3	6.0	25.0U	5.0U		
	2800	OTTA	1	S	2058.0	2058.3	1.5	6.0	3.0		
	9400	TYKW	45	C	2130.0	2137.6	25.0	10.0	2.5		
	35000	NAGO	20	GRF	2330.0	2353.0	50.0	40.0			
	3750	TYKW	45	C	2334.0	2342.2	20.0	20.0	6.0		
	2695	PENT	21	GRF	2335.0	2343.0	55.0	7.8	2.6		
	2000	TYKW	45	C	2337.0	2337.4	8.0	20.0	3.0		
	9400	TYKW	45	C	2337.0	2342.5	23.0	48.0	17.0		
	2695	PENT	2	S/F	2337.0	2339.0	2.0	6.0	4.5		
	1000	TYKW	21	GRF	2340.0	2349.0	9.0	3.0	1.5		
	245	LEAR	47	GB	2341.0	2341.1	.6	80.0			QL=6 ST=2 TYP=5
	1000	TYKW	5	S	2341.3	2341.7	1.0	3.0	1.0		
	8800	LEAR	4	S/F	2342.1	2342.1	2.2	32.0			QL=3 ST=2 TYP=3
	2695	PENT	8	S	2342.4	2342.4	.1	5.0			
	15400	LEAR	4	S/F	2343.6	2347.3	5.5	49.0			QL=3 ST=2 TYP=3
	4995	PALE	4	S/F	2344.6	2344.6	3.5	19.0			QL=6 ST=2 TYP=3
	8800	PALE	4	S/F	2344.6	2344.6	4.9	40.0			QL=6 ST=2 TYP=3
	15400	PALE	4	S/F	2344.6	2346.5	4.0	32.0			QL=6 ST=2 TYP=3
	2000	TYKW	30	PBI	2345.0		55.0	2.0	1.0		
	3750	TYKW	29	PBI	2354.0		50.0	4.0	2.0		
09	33	UPIC	43	NS	0531.9		481.5U				
	260	ONDR	44	NS	0554.0E	1236.0U	490.0D	162.0U			
	127	TORN	44	NS	0910.0E	0959.9	240.0D	100.0	1.0		V1
	245	SGMR	43	NS	0950.0	2249.5	846.0D	150.0			QL=6 ST=2 TYP=1
	245	PALE	43	NS	1630.0	1714.8	295.0D	110.0			QL=6 ST=2 TYP=1
	208	VORO	44	NS	2100.0E		120.0D		4.0		
	245	LEAR	43	NS	2317.0	0706.8	612.0D	100.0			QL=6 ST=2 TYP=1
	9400	TYKW	30	PBI	0000.0		100.0	10.0	4.0		
	9400	TYKW	5	S	0028.0	0029.1	3.0	4.0	1.5		
	2695	PENT	45	C	0038.0	0038.2	7.0	18.0	4.5		
	2000	TYKW	31	ABS	0040.0	0210.0	230.0	-4.0	-2.0		
	1000	TYKW	8	S	0051.6	0051.7	.4	4.0	1.0		
	1000	TYKW	31	ABS	0110.0	0210.0	170.0	-1.5	-.7		
	3750	TYKW	32	ABS	0148.0	0205.0	50.0	-3.0	-1.5		
	9400	TYKW	20	GRF	0232.0	0250.0	40.0	6.0	3.0		
	500	HIRA	8	S	0244.2	0244.3	.3	450.0			0
	9395	PEKG	3	S	0320.0	0322.3	13.0	30.0	4.9		
	500	HIRA	8	S	0320.1	0320.1	.2	200.0			WL
	1000	TYKW	8	S	0320.3	0320.4	.2	17.0	4.0		
	3750	TYKW	5	S	0321.0	0322.4	3.0	10.0	4.0		
	9400	TYKW	5	S	0321.0	0322.4	4.0	23.0	10.0		
	8800	MANI	3	S	0321.3	0322.2	1.9	53.5	17.8		
	4995	MANI	3	S	0321.3	0322.6	1.9	31.1	10.4		
	3750	TYKW	29	PBI	0324.0		30.0	3.0	1.5		
	9400	TYKW	29	PBI	0325.0		40.0	6.0	3.0		
	2950	GORK	21	GRF	0330.0E	0728.3	510.0D	21.0			
	6100	KISV	2	S/F	0428.7	0430.9	4.0	4.0			
	2000	TYKW	20	GRF	0535.0	0538.0	55.0	3.0	1.5		
	6100	KISV	2	S/F	0556.3	0556.7	2.0	6.0			
	9100	GORK	1	S	0556.5	0556.5	.8	4.0	2.0		
	1000	TYKW	5	S	0610.6	0610.8	.7	5.0	1.0		
	1000	TYKW	5	S	0628.3	0628.7	1.5	2.0	.7		
	500	HIRA			0702.3	0702.7		20.0			WL
	500	HIRA	46	C	0702.3	0704.0	2.3	60.0	8.0		WL
	808	ONDR	40	F	0702.4	0704.6	2.6	81.0	42.0		
	650	GORK	4	S/F	0704.0	0704.0	.4	38.0			
	6100	KISV	2	S/F	0704.0	0705.3	2.5	4.0			
	3100	CRIM	1	S	0715.0	0715.2	6.0	9.0	3.0		
	9400	TYKW	45	C	0724.0	0727.0	35.0	38.0	12.0		
	3750	TYKW	45	C	0724.0	0727.2	9.0	42.0	16.0		
	4995	MANI	4	S/F	0724.0	0726.4	6.0	71.4	23.9		
	8400	BERN	21	GRF	0724.0	0727.0	90.0	73.0			
	2695	MANI	4	S/F	0724.4	0726.0	5.4	54.0	16.2		
	8800	MANI	4	S/F	0724.4	0726.3	4.6	44.6	14.9		
	9100	GORK	21	GRF	0724.5	0735.0	79.4	19.0			
	6100	KISV			0724.7	0725.5		33.0			
	6100	KISV	46	C	0724.7	0727.1	6.0	51.0			
	6100	KISV			0724.7	0727.6		40.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
09	2000	TYKW	21	GRF	0725.0	0745.0	65.0	5.0	3.0		
	9100	GORK	4	S/F	0725.0	0727.0	3.5	35.0			
	9395	PEKG	45	C	0725.0	0727.0	4.0	38.0	11.8		
	2000	TYKW	45	C	0726.0	0726.6	3.0	19.0	5.0		
	2650	DWIN	4	S/F	0726.0	0726.0	5.0	265.0	100.0		
	2950	GORK	4	S/F	0726.3	0726.4	2.0	103.0			
	650	GORK	2	S/F	0727.2	0727.7	1.5	4.0			
	2000	TYKW	29	PBI	0729.0		10.0	3.0	1.5		
	9395	PEKG	29	PBI	0729.0	0736.4	39.0	22.6	7.7		
	3750	TYKW	29	PBI	0733.0		80.0	13.0	6.0		
	9400	TYKW	30	PBI	0759.0		50.0	6.0	3.0		
	15000	KISV	2	S/F	0815.0	0816.0	3.0	11.0			
	430	KRAK	8	S	0815.3	0815.5	.6	45.0			
	650	GORK	2	S/F	0815.4	0816.0	1.5	9.0			
	6100	KISV	4	S/F	0815.4	0816.5	3.0	7.0			
	9400	TYKW	5	S	0815.5	0816.5U	7.0	12.0U	4.0		
	500	HIRA	45	C	0815.6	0815.7	1.0	20.0	10.0		WL
	9100	GORK	1	S	0815.8	0816.6	2.3	8.0	4.0		
	536	ONDR	40	F	0834.8	0836.0	4.0	34.0			
	500	HiRA	45	C	0836.6	0836.8	1.0	30.0	8.0		WL
	430	KRAK	41	F	0836.7	0836.8	2.1	97.0			
	204	IZMI	5	S	0836.8	0836.9	1.0	790.0	250.0		
	204	IZMI	42	SER	0917.0	0959.5	45.0	200.0			
	430	KRAK	2	S/F	0933.5	0933.9	1.5	83.0	6.0		
	9100	GORK	1	S	0933.5	0934.9	3.7	51.6	9.0		
	950	GORK	20	GRF	0946.9	0950.0	8.3	8.0			
	808	ONDR	4	S/F	0950.3	0955.8	11.9	12.0	9.0		
	430	KRAK	4	S/F	0952.3	0956.9	10.2	60.0	5.0		
	6100	KISV	21	GRF	0952.5	0956.9	14.0	23.0			
	650	GORK	46	C	0952.9	0956.3	7.5	32.0			
	650	GORK			0952.9	1000.4		16.0			
	810	KRAK	4	S/F	0954.8	0955.2	3.2	11.0	7.0		
	536	ONDR	40	F	0955.7	0957.3	7.9	21.0	16.0		
	15000	KISV	1	S	0956.3	0956.8	1.5	17.0			
	8400	BERN	3	S	0956.5	0956.9	4.0	44.0			
	9100	GORK	4	S/F	0956.5	0956.9	2.0	33.0			
	2950	GORK	1	S	0956.5	0957.0	1.8	37.0	18.0		
	15000	KISV	1	S	1029.4	1029.9	2.0	19.0			
	204	IZMI	5	S	1047.0	1048.0	1.5	125.0	70.0		
	9100	GORK	1	S	1058.5	1100.4	1.9	6.9	3.0		
	950	GORK	1	S	1105.3	1106.0	5.4	2.0			
	6100	KISV	28	PRE	1111.6	1112.4	12.0	5.0			
	9100	GORK	21	GRF	1117.7		48.0D				
	4995	ATHN	49	GB	1123.1	1126.3	26.9	720.0			QL=6 ST=2 TYP=6
	8800	ATHN	49	GB	1123.3	1126.3	26.7	680.0			QL=6 ST=2 TYP=6
	15000	KISV	47	GB	1123.5	1126.9	12.0	600.0			
	6100	KISV	45	C	1123.6	1127.0	11.0	440.0			
	1415	ATHN	49	GB	1124.0	1125.3	26.0	1000.0			QL=2 ST=2 TYP=6
	2695	ATHN	47	GB	1124.0	1126.5	26.0	320.0			QL=6 ST=2 TYP=5
	2800	OTTA	3	S	1124.5	1128.0	13.5	307.0	92.0		
	11800	BERN	47	GB	1124.7	1127.1	6.0D	1095.0			
	8400	BERN	47	GB	1124.7	1127.2	6.0D	926.0			
	9100	GORK	3	S	1124.8	1127.1	6.0	760.0			
	4995	SGMR	49	GB	1124.8	1127.3	27.5	800.0			QL=6 ST=2 TYP=6
	2950	GORK	3	S	1124.8	1127.6	12.7	328.0			
	2650	DWIN	3	S	1125.0	1127.0	20.0	250.0	100.0		
	3100	CRIM	3	S	1125.0	1128.4	22.0	344.0	111.0		
	19600	BERN	3	S	1125.5	1127.1	6.0D	345.0			
	8800	SGMR	49	GB	1125.6	1126.8	15.5	710.0			QL=6 ST=2 TYP=6
	950	GORK	4	S/F	1125.6	1126.8	7.5	64.0			
	15400	SGMR	49	GB	1125.6	1127.1	16.9	500.0			QL=6 ST=2 TYP=6
	2695	SGMR	47	GB	1125.6	1127.3	14.2	310.0			QL=6 ST=2 TYP=5
	808	ONDR	2	S/F	1125.7	1126.9	4.7	15.0	14.0		
	3000	IZMI	5	S	1126.0	1128.0	7.0	149.0	75.0		
	930	BORD	45	C	1128.6	1129.3	2.4	78.0	13.0		
	6100	KISV	29	PBI	1134.5	1134.5	25.0	39.0			
	9100	GORK	3	S	1134.8	1136.7	3.0	30.0	15.0		
	15000	KISV	29	PBI	1135.5	1135.5	8.0	38.0			
	2800	OTTA	30	PBI	1138.0	1138.0	100.0	16.2	5.4		
	810	KRAK	4	S/F	1211.5	1213.1	7.7	26.0	9.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
09	8800	ATHN	4	S/F	1211.5	1214.0	9.6	16.0			QL=6 ST=2 TYP=3
	4995	ATHN	4	S/F	1211.6	1215.0	7.7	18.0			QL=6 ST=2 TYP=3
	430	KRAK	45	C	1212.3	1214.1	8.7	600.0D	25.0		
	536	ONDR	40	F	1212.4	1214.7	5.2	33.0	25.0		
	4995	SGMR	4	S/F	1212.6	1215.0	23.4	38.0			QL=6 ST=2 TYP=3
	6100	KISV	27	RF	1212.7	1215.0	12.0	16.0			
	410	SGMR	49	GB	1212.8	1213.5	4.3	640.0			QL=6 ST=2 TYP=6
	2800	OTTA	4	S/F	1213.0	1215.0	5.0	20.0	9.6		
	2650	DWIN	1	S	1213.0	1215.0	5.0	25.0	10.0		
	2695	SGMR	47	GB	1213.1	1215.0	28.7	32.0			QL=6 ST=2 TYP=5
	8800	SGMR	4	S/F	1213.3	1213.8	2.7	26.0			QL=6 ST=2 TYP=3
	610	SGMR	47	GB	1213.5	1213.8	1.8	62.0			QL=6 ST=2 TYP=5
	808	ONDR	2	S/F	1213.7	1215.2	5.1	19.0	12.0		
	245	SGMR	47	GB	1214.1	1214.3	1.0	300.0			QL=6 ST=2 TYP=5
	1415	SGMR	8	S	1214.1	1215.1	1.7	24.0			QL=6 ST=2 TYP=3
	930	BORD	45	C	1215.0	1218.2	5.0	35.0	12.0		
	810	KRAK	27	RF	1228.3	1233.9	17.8	16.0	8.0		
	2650	DWIN	1	S	1229.0	1231.0	5.0	40.0	25.0		
	430	KRAK	45	C	1229.4	1234.0U	8.2	600.0D	36.0D		
	2800	OTTA	3	S	1229.5	1231.6	7.5	48.0	20.3		
	808	ONDR	2	S/F	1229.8	1232.7	7.9	13.0	12.0		
	536	ONDR	40	F	1230.4	1233.6	5.7	24.0	13.0		
	127	TORN	7	C	1231.2	1231.6	1.0	300.0	150.0		
	930	BORD	3	S	1232.0	1235.0	8.0	20.0	7.0		
	6100	KISV	20	GRF	1321.3	1322.8	4.0	4.0			
	8800	PALE	8	S	1836.6	1836.8	.4	26.0			QL=5 ST=2 TYP=3
	610	PALE	49	GB	1908.6	1908.8	.4	720.0			QL=6 ST=2 TYP=6
	610	SGMR	49	GB	1908.6	1908.8	.5	780.0			QL=6 ST=2 TYP=6
	2800	OTTA	20	GRF	1920.0	1934.0	120.0	4.8	1.6		
	200	HIRA	46	C	1954.4	1954.7	2.6	57.0	24.0		0
	9400	HUAN	2	S/F	2005.8	2008.0	6.0	10.3	5.0		L
	245	PALE	47	GB	2059.3	2059.5	.3	57.0			QL=5 ST=2 TYP=5
	500	HIRA	8	S	2200.1	2200.3	.5	17.0			SL
	9400	TYKW	28	PRE	2214.0	2220.0	6.0	10.0	3.0		
	2800	OTTA	21	GRF	2217.0	0022.0	210.0D	36.0			
	3750	TYKW	5	S	2218.0	2218.3	1.0	3.0	1.0		
	2000	TYKW	45	C	2218.0	2218.4	1.5	12.0	5.0		
	2800	OTTA	1	S	2218.0	2218.5	1.8	6.0	2.0		
	9400	TYKW	45	C	2220.0	2224.1	9.0	275.0	70.0		
	3750	TYKW	21	GRF	2220.0	2313.0	325.0	36.0	19.0		
	2000	TYKW	21	GRF	2220.0	2313.0	330.0	28.0	15.0		
	2000	TYKW	45	C	2220.5	2223.9	7.5	79.0	7.0		
	3750	TYKW	45	C	2220.5	2224.0	7.5	31.0	8.0		
	8800	SGMR	47	GB	2220.8	2224.1	10.8	230.0			QL=6 ST=2 TYP=5
	2800	OTTA	1	S	2220.9	2221.0	1.0	5.4	2.7		
	8800	MANI	4	S/F	2221.0	2224.3	7.0	397.8	136.2		
	4995	SGMR	47	GB	2222.1	2224.1	9.5	56.0			QL=6 ST=2 TYP=5
	17000	NOBE	4	S/F	2222.3	2224.1	5.1	199.0			L
	1000	TYKW	45	C	2222.5	2223.2	3.5	32.0	7.0		
	4995	PALE	4	S/F	2222.5	2223.5	2.6	41.0			QL=5 ST=2 TYP=3
	15400	PALE	47	GB	2222.5	2224.1	2.6	280.0			QL=5 ST=2 TYP=5
	8800	PALE	47	GB	2222.5	2224.1	2.6	280.0			QL=5 ST=2 TYP=5
	2695	MANI	4	S/F	2222.5	2224.2	2.6	69.9	23.3		
	1415	PALE	4	S/F	2222.6	2223.3	2.9	27.0			QL=5 ST=2 TYP=3
	1415	SGMR	8	S	2222.8	2223.3	1.5	32.0			QL=6 ST=2 TYP=3
	15400	SGMR	47	GB	2222.8	2224.1	3.2	290.0			QL=6 ST=2 TYP=5
	2800	OTTA	4	S/F	2222.9	2224.0	2.2	40.0	20.0		
	1415	MANI	4	S/F	2223.0	2223.5	1.1	12.9	4.3		
	2695	SGMR	47	GB	2223.0	2224.0	1.5	63.0			QL=6 ST=2 TYP=5
	2695	PALE	47	GB	2223.1	2224.0	2.0	72.0			QL=5 ST=2 TYP=5
	2695	PENT	3	S	2224.8	2225.0	3.0	81.0	14.0		
	1000	TYKW	29	PBI	2226.0		4.0	1.0	.5		
	17000	NOBE	21	GRF	2227.4	2300.5	90.0	43.0			L
	3750	TYKW	30	PBI	2228.0		12.0	6.0	3.0		
	9400	TYKW	30	PBI	2229.0		300.0	33.0	19.0		
	2000	TYKW	45	C	2230.0	2233.6	4.0	5.0	.7		
	1000	TYKW	21	GRF	2230.0	2312.0	320.0	14.0	6.0		
	9400	TYKW	45	C	2233.0	2235.0	6.0	60.0	7.0		
	2000	TYKW	45	C	2234.0	2236.1	5.0	38.0	6.0		
	500	HIRA	8	S	2235.4	2235.4	.5	65.0			WL

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
09	3750	TYKW	5	S	2235.4	2235.8	3.5	30.0	5.0		
	8800	SGMR	47	GB	2235.5	2235.8	.5	61.0			QL=6 ST=2 TYP=5
	1000	TYKW	45	C	2235.5	2235.9	4.5	11.0	3.5		
	2800	OTTA	3	S	2235.5	2235.9	1.5	28.0	9.4		
	15400	SGMR	8	S	2235.6	2235.6	.2	40.0			QL=6 ST=2 TYP=3
	610	SGMR	8	S	2235.6	2235.8	.2	47.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	2235.6	2235.8	.5	33.0			QL=6 ST=2 TYP=3
	4995	SGMR	8	S	2235.6	2235.8	.4	32.0			QL=6 ST=2 TYP=3
	1415	SGMR	8	S	2235.6	2236.1	.7	28.0			QL=6 ST=2 TYP=3
	8800	PALE	47	GB	2235.8	2236.0	1.2	70.0			QL=5 ST=2 TYP=5
	1415	PALE	8	S	2235.8	2236.0	1.2	26.0			QL=5 ST=2 TYP=3
	15400	PALE	8	S	2235.8	2236.0	1.2	35.0			QL=5 ST=2 TYP=3
	2695	PALE	8	S	2235.8	2236.0	1.2	26.0			QL=5 ST=2 TYP=3
	4995	PALE	8	S	2235.8	2236.0	1.2	35.0			QL=5 ST=2 TYP=3
	2000	TYKW	28	PRE	2240.0	2249.7	11.0	8.0	2.0		
	9400	TYKW	5	S	2241.0	2243.0	5.0	3.0	1.5		
	1000	TYKW	45	C	2241.0	2244.0	4.0	25.0	6.0		
	245	SGMR	8	S	2244.3	2244.3	1.0	98.0			QL=6 ST=2 TYP=3
	1000	TYKW	45	C	2246.0	2249.8	5.0	55.0	10.0		
	3750	TYKW	45	C	2247.0	2256.8	22.0	16.0	5.0		
	9400	TYKW	21	GRF	2247.0	2306.0	55.0	26.0	13.0		
	9400	TYKW	45	C	2248.0	2257.0	14.0	15.0	7.0		
	2000	TYKW	45	C	2251.0	2256.4	9.0	52.0	12.0		
	1000	TYKW	47	GB	2251.0	2256.6	19.0	590.0	85.0		
	2800	OTTA	3	S	2252.0	2257.0	12.0	13.8	5.7		
	1415	PALE	47	GB	2257.5	2257.8	6.5	180.0			QL=6 ST=2 TYP=5
	2000	TYKW	29	PBI	2300.0		8.0	7.0	3.0D		
	9400	TYKW	45	C	2303.5	2304.3	1.5	5.0	2.0		
	1000	TYKW	45	C	2314.5	2317.0	4.0	3.0	1.0		
	3750	TYKW	5	S	2323.0	2325.0	5.0	59.0	6.0		
	9400	TYKW	5	S	2323.0	2325.0	5.0	85.0	10.0		
	500	HIRA	45	C	2324.4	2324.7	1.0	350.0	100.0		MR
	2000	TYKW	5	S	2324.5	2325.0	4.5	75.0	9.0		
	1000	TYKW	5	S	2324.5	2325.0	4.0	39.0	6.0		
	610	LEAR	49	GB	2324.6	2324.8	.9	720.0			QL=3 ST=3 TYP=6
	610	SGMR	49	GB	2324.6	2324.8	1.4	630.0			QL=6 ST=2 TYP=6
	1415	SGMR	8	S	2324.6	2325.1	2.0	40.0			QL=4 ST=2 TYP=3
	17000	NOBE	1	S	2324.7	2325.0	1.5	104.0			L
	410	SGMR	47	GB	2324.8	2324.8	.5	110.0			QL=6 ST=2 TYP=5
	2695	SGMR	8	S	2324.8	2324.8	1.3	35.0			QL=4 ST=2 TYP=3
	410	LEAR	47	GB	2324.8	2324.8	.2	210.0			QL=3 ST=3 TYP=5
	4995	SGMR	8	S	2324.8	2325.0	1.0	20.0			QL=4 ST=2 TYP=3
	606	MANI	47	GB	2324.9	2325.0	1.6	2139.8	713.3		
	8800	LEAR	47	GB	2325.0	2325.1	22.0	94.0			QL=3 ST=3 TYP=5
	1415	LEAR	8	S	2325.0	2325.1	.6	40.0			QL=3 ST=3 TYP=3
	4995	LEAR	4	S/F	2325.0	2325.1	66.0	49.0			QL=3 ST=3 TYP=3
	2695	LEAR	47	GB	2325.0	2325.1	68.0	68.0			QL=3 ST=3 TYP=5
	1415	MANI	3	S	2325.0	2325.2	1.5	25.9	8.6		
	4995	MANI	3	S	2325.0	2325.2	1.0	27.3	9.1		
	8800	MANI	3	S	2325.0	2325.2	1.5	107.6	35.9		
	2695	MANI	3	S	2325.0	2325.2	1.5	92.0	30.6		
	1000	TYKW	45	C	2332.0	2333.4	2.0	2.0	.5		
	8800	LEAR	4	S/F	2337.3	2337.3	220.0	41.0			QL=3 ST=3 TYP=3
	4995	LEAR	4	S/F	2337.3	2337.5	660.0	24.0			QL=3 ST=3 TYP=3
	2695	LEAR	8	S	2337.3	2337.5	.2	20.0			QL=3 ST=3 TYP=3
	9400	TYKW	5	S	2354.0	2354.8	2.0	5.0	1.5		
	2000	TYKW	20	GRF	2355.0	0017.0	55.0	3.0	1.5		
10	260	ONDR	44	NS	0553.0E	1204.0U	425.0D				
	204	IZMI	43	NS	0600.0		360.0D	17.0			
	33	UPIC	43	NS	0601.9		748.1D				
	127	TORN	43	NS	0700.0	1253.2	480.0	900.0	2.0		V1
	245	PALE	43	NS	1629.0	1804.5	736.0D	76.0			QL=6 ST=2 TYP=1
	208	VORO	44	NS	2100.0E		360.0D		47.0		
	410	LEAR	43	NS	2318.0	2320.6	611.0D	60.0			QL=5 ST=2 TYP=1
	245	LEAR	43	NS	2318.0	2337.8	611.0D	37.0			QL=5 ST=2 TYP=1
	9400	TYKW	45	C	0027.0	0027.7	2.5	15.0	3.0		
	3750	TYKW	5	S	0027.3	0027.7	3.0	8.0	2.0		
	3750	TYKW	5	S	0046.0	0049.0	6.0	2.0	1.0		
	9400	TYKW	28	PRE	0052.0	0057.1	5.5	16.0	5.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
10	3750	TYKW	5	S	0052.3	0052.7	2.0	4.0	1.5		
	200	HIRA	46	C	0056.6	0056.7	2.0	78.0	20.0		ML
	3750	TYKW	45	C	0056.7	0059.2	9.3	80.0	15.0		
	17000	NOBE	7	C	0056.8	0059.0	3.5	552.0			L
	8800	LEAR	49	GB	0057.0	0059.0	11.1	1000.0			QL=6 ST=2 TYP=6
	2000	TYKW	45	C	0057.5	0058.1	2.5	6.0	1.0		
	9400	TYKW	47	GB	0057.5	0059.0	7.5	920.0	100.0		
	8800	PALE	49	GB	0057.6	0059.0	11.4	1000.0			QL=6 ST=2 TYP=6
	4995	PALE	47	GB	0057.6	0059.1	7.9	219.0			QL=6 ST=2 TYP=5
	4995	LEAR	47	GB	0057.6	0059.1	3.9	200.0			QL=6 ST=2 TYP=5
	2695	PALE	8	S	0057.8	0058.1	.3	13.0			QL=6 ST=2 TYP=3
	2695	LEAR	8	S	0057.8	0058.1	.3	18.0			QL=6 ST=2 TYP=3
	15400	PALE	49	GB	0057.8	0059.0	10.8	800.0			QL=6 ST=2 TYP=6
	15400	LEAR	49	GB	0057.8	0059.0	9.0	700.0			QL=6 ST=2 TYP=6
	1000	TYKW	45	C	0058.0	0058.1	1.5	6.0	1.0		
	2695	MANI	4	S/F	0058.0	0058.2	2.3	33.1	11.0		
	245	LEAR	47	GB	0058.0	0059.1	1.1	300.0			QL=6 ST=2 TYP=5
	8800	MANI	47	GB	0058.0	0059.2	3.0	1174.7	391.6		
	4995	MANI	4	S/F	0058.0	0059.3	3.0	199.3	66.4		
	35000	NAGO	5	S	0059.0	0059.0	1.0	110.0			
	2000	TYKW	31	ABS	0100.0	0130.0	45.0	-4.0	-2.0		
	17000	NOBE	29	PBI	0100.3	0100.3	23.0	48.0			L
	35000	NAGO	29	PBI	0102.0	0102.0	118.0	27.0			
	9400	TYKW	30	PBI	0105.0		15.0	32.0	13.0		
	3750	TYKW	30	PBI	0106.0		9.0	5.0	2.0		
	410	LEAR	8	S	0114.8	0115.0	.3	39.0			QL=6 ST=2 TYP=3
	3750	TYKW	31	ABS	0115.0	0130.0	40.0	-5.0	-2.5		
	9400	TYKW	31	ABS	0120.0	0130.0	40.0	-8.0	-4.0		
	8800	LEAR	8	S	0213.8	0214.8	2.0	13.0			QL=6 ST=2 TYP=3
	9400	TYKW	5	S	0214.0	0214.8	15.0U	8.0	3.0U		INTERFERENCE
	15400	LEAR	8	S	0214.3	0214.8	1.5	10.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0228.3	0228.5	.3	43.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0228.3	0228.6	.5	15.0			QL=6 ST=2 TYP=3
	500	HIRA	20	GRF	0236.0	0332.0	100.0	10.0	4.0		SR
	610	LEAR	8	S	0240.0	0240.3	.8	11.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0240.0	0240.5	.8	28.0			QL=6 ST=2 TYP=3
	500	HIRA	41	F	0240.0	0248.2	10.3	35.0			MR
	410	LEAR	8	S	0240.1	0240.3	.2	32.0			QL=6 ST=2 TYP=3
	1000	TYKW	45	C	0243.0	0248.1	9.0	16.0	4.0		
	3750	TYKW	45	C	0246.0	0248.4	6.0	11.0	3.0		
	410	LEAR	47	GB	0246.5	0248.0	4.1	119.0			QL=6 ST=2 TYP=5
	2000	TYKW	5	S	0247.0	0248.4	3.5D	14.0	4.0D		
	8800	LEAR	20	GRF	0247.6	0249.8	5.0	5.0			QL=6 ST=2 TYP=2
	610	LEAR	4	S/F	0247.8	0248.1	2.5	44.0			QL=6 ST=2 TYP=3
	1415	LEAR	20	GRF	0248.3	0248.3	1.8	11.0			QL=6 ST=2 TYP=2
	606	MANI	3	S	0248.5	0249.1	3.5	40.8	13.6		
	2695	MANI	3	S	0248.5	0249.5	3.3	11.2	3.7		
	4995	MANI	3	S	0248.5	0249.5	1.5	21.8	7.3		
	4995	LEAR	20	GRF	0249.0	0249.1	1.0	11.0			QL=6 ST=2 TYP=2
	2695	LEAR	20	GRF	0249.0	0249.3	.3	7.0			QL=6 ST=2 TYP=2
	200	HIRA	27	RF	0253.0	0303.0	292.0	155.0	18.0		WL
	200	HIRA			0253.0	0326.5		70.0			MR
	245	PALE	8	S	0257.1	0257.5	.5	31.0			QL=6 ST=2 TYP=3
	245	LEAR	47	GB	0301.3	0303.1	2.8	119.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	0301.6	0303.1	3.4	110.0			QL=6 ST=2 TYP=5
	100	HIRA	27	RF	0304.0	0346.0	82.0	120.0	45.0		MR
	9100	GORK	23	GRF	0306.0E						
	3750	TYKW	20	GRF	0311.0	0314.0	30.0	2.0	1.0		INTERFERENCE
	9400	TYKW	5	S	0331.0	0332.7	7.0U	7.0	3.0U		
	9100	GORK	1	S	0332.4	0333.2	1.5	7.0	3.5		
	950	GORK	4	S/F	0350.3	0351.5	2.5	55.0			
	650	GORK	4	S/F	0350.6	0351.8	1.2	57.0			
	6100	KISV	26	FAL	0400.0	0400.0	80.0	6.0			
	410	LEAR	8	S	0420.3	0420.6	.5	13.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0420.3	0420.6	.7	25.0			QL=6 ST=2 TYP=3
	6100	KISV	21	GRF	0423.0	0427.6	16.0	11.0			
	9395	PEKG	3	S	0425.0	0427.6	8.0	24.0	4.2		
	500	HIRA	45	C	0426.6	0427.2	1.6	400.0	150.0		SLMR
	410	LEAR	49	GB	0426.8	0427.5	1.0	660.0			QL=6 ST=2 TYP=6
	2000	TYKW	5	S	0427.0	0427.6	1.5	6.0	2.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
10	3750	TYKW	5	S	0427.0	0427.7	1.5	5.0	1.5		
	200	HIRA	45	C	0427.0	0427.5	.7	870.0	140.0		WL
	15400	LEAR	8	S	0427.0	0427.6	1.0	7.0			QL=6 ST=2 TYP=3
	245	LEAR	47	GB	0427.1	0427.5	.7	290.0			QL=6 ST=2 TYP=5
	410	PALE	49	GB	0427.1	0427.5	.7	1199.0			QL=6 ST=2 TYP=6
	15000	KISV	2	S/F	0427.1	0427.6	2.0	21.0			
	610	PALE	47	GB	0427.1	0427.8	1.0	270.0			QL=6 ST=2 TYP=5
	650	GORK	4	S/F	0427.2	0427.3	1.8	80.0D			
	245	PALE	47	GB	0427.3	0427.5	.5	300.0			QL=6 ST=2 TYP=5
	8800	LEAR	8	S	0427.3	0427.5	.2	23.0			QL=6 ST=2 TYP=3
	610	LEAR	47	GB	0427.3	0427.5	.8	160.0			QL=6 ST=2 TYP=5
	2695	LEAR	8	S	0427.3	0427.6	.7	5.0			QL=6 ST=2 TYP=3
	1000	TYKW	5	S	0427.4	0427.7	1.0	8.0	3.0		
	4995	LEAR	8	S	0427.5	0427.6	.3	5.0			QL=6 ST=2 TYP=3
	1415	LEAR	8	S	0427.5	0427.8	.6	4.0			QL=6 ST=2 TYP=3
	9100	GORK	1	S	0427.5	0427.9	1.3	25.0			
	9400	TYKW	29	PBI	0428.0		12.0U	6.0	3.0U		
	4995	MANI	3	S	0429.0	0429.8	1.5	17.4	5.8		
	606	MANI	8	S	0429.4	0429.7	.8	1528.5	509.5		
	2695	MANI	3	S	0429.4	0429.8	1.2	14.9	5.0		
	15000	KISV	2	S/F	0433.3	0433.6	2.0	16.0			
	2950	GORK	1	S	0433.6	0438.6	5.0U	6.1			
	950	GORK	21	GRF	0435.4	0438.0	7.5	4.0			
	950	GORK	1	S	0436.7	0438.9	2.2U	10.0			
	650	GORK	8	S	0440.0	0440.3	.8	35.0			
	6100	KISV	20	GRF	0448.0	0452.0	16.0	5.0			
	9400	TYKW	20	GRF	0449.0	0454.5	35.0	8.0	4.0		
	6100	KISV	21	GRF	0504.5	0505.2	16.0	17.0			
	4995	LEAR	8	S	0504.8	0505.3	1.5	15.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	0505.0	0505.3	1.0	7.0	2.0		
	8800	LEAR	8	S	0505.0	0505.3	.8	10.0			QL=6 ST=2 TYP=3
	3750	TYKW	21	GRF	0540.0	0552.0	180.0U	6.0	2.0		INTERFERENCE
	9400	TYKW	45	C	0541.0	0542.8	6.0	72.0	15.0		
	6100	KISV	40	F	0541.0	0542.9		19.0			
	9395	PEKG	3	S	0541.0	0543.0	13.0	67.0	16.6		
	6100	KISV			0541.0	0552.2		13.0			
	6100	KISV			0541.0	0604.0		14.0			
	6100	KISV			0541.0	0612.5		21.0			
	15000	KISV	4	S/F	0541.5	0542.9	2.5	95.0			
	4995	ATHN	4	S/F	0541.6	0542.8	2.4	3.0			QL=6 ST=2 TYP=3
	8800	ATHN	47	GB	0541.6	0543.0	6.9	58.0			QL=6 ST=2 TYP=5
	17000	NOBE	7	C	0542.1	0542.9	65.0	39.0			L
	9100	GORK	4	S/F	0542.2	0543.2	2.1	60.0			
	2000	TYKW	20	GRF	0545.0	0615.0	140.0	5.0	2.0		
	2950	GORK	21	GRF	0545.9	1006.0	507.0D	135.0			
	9400	TYKW	30	PBI	0547.0		85.0	14.0	7.0		
	930	BORD	41	F	0548.7	0548.7	.2	25.0	2.0		
	9400	TYKW	5	S	0549.0	0552.0	10.0	6.0	3.0		
	1000	TYKW	21	GRF	0550.0	0655.0	170.0	2.0	1.0		
	8800	LEAR	4	S/F	0551.1	0552.3	4.0	10.0			QL=6 ST=2 TYP=3
	9400	TYKW	45	C	0601.0	0612.3	19.0	48.0	18.0D		
	8800	LEAR	4	S/F	0603.1	0604.0	4.2	36.0			QL=6 ST=2 TYP=3
	15400	LEAR	4	S/F	0603.1	0604.1	4.2	39.0			QL=6 ST=2 TYP=3
	35000	NAGO	20	GRF	0605.0	0618.0	34.0	27.0			
	410	LEAR	8	S	0606.6	0607.0	.7	43.0			QL=6 ST=2 TYP=3
	650	GORK	41	F	0607.5	0612.2	28.5	14.0			
	650	GORK			0607.5	0631.6		23.0			
	8800	ATHN	4	S/F	0609.8	0611.1	5.7	30.0			QL=6 ST=2 TYP=3
	2695	ATHN	4	S/F	0609.8	0611.1	5.0	6.0			QL=6 ST=2 TYP=3
	4995	ATHN	4	S/F	0609.8	0611.1	5.7	9.0			QL=6 ST=2 TYP=3
	3750	TYKW	20	GRF	0610.0	0613.0	120.0	6.0	3.0U		
	8800	LEAR	4	S/F	0610.1	0612.3	7.0	35.0			QL=6 ST=2 TYP=3
	15400	LEAR	4	S/F	0610.3	0612.5	7.3	34.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0611.8	0611.8	.8	25.0			QL=6 ST=2 TYP=3
	9400	TYKW	29	PBI	0620.0		25.0	14.0	7.0		
	950	GORK	4	S/F	0629.1	0631.6	3.4	105.0			
	410	LEAR	4	S/F	0741.6	0743.3	2.4	11.0			QL=6 ST=2 TYP=3
	1000	TYKW	42	SER	0749.0	0805.0	25.0	26.0	3.0		
	410	LEAR	8	S	0756.6	0756.8	.4	10.0			QL=6 ST=2 TYP=3
	245	LEAR	47	GB	0756.6	0756.8	.5	110.0			QL=6 ST=2 TYP=5

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
10	810	KRAK	42	SER	0951.8	0957.7	10.7	190.0			
	930	BORD	41	F	0952.0	0954.0	10.0	297.0	13.0		
	950	GORK	21	GRF	1045.0	1058.5	102.0D	55.0			
	430	KRAK	42	SER	1103.9	1104.0	13.3	260.0			
	430	KRAK			1103.9	1117.4		130.0			
	650	GORK	46	C	1106.8	1108.6	6.2	12.0			
	650	GORK			1106.8	1110.3		23.0			
	650	GORK			1106.8	1110.6		16.0			
	810	KRAK	8	S	1110.5	1110.5	.8	18.0			
	650	GORK	21	GRF	1113.0	1206.0	53.0D	16.0			
	204	IZMI	8	S	1117.0	1117.0	.2	210.0			
	6100	KISV	28	PRE	1130.0	1135.9	11.0	7.0			
	3100	CRIM	28	PRE	1135.0	1141.0	6.0U	4.0	1.0		
	2800	OTTA	21	GRF	1135.0	1148.0	40.0	10.4	5.2		
	2800	OTTA	3	S	1141.0	1142.9	5.0	66.0	22.0		
	3100	CRIM	3	S	1141.0	1143.0	3.0	62.0	21.0		
	6100	KISV	29	PBI	1141.0	1144.5	20.0	17.0			
	4995	SGMR	47	GB	1141.1	1142.8	9.4	110.0			QL=6 ST=2 TYP=5
	4995	ATHN	47	GB	1141.3	1142.6	6.8	88.0			QL=6 ST=2 TYP=5
	8800	ATHN	47	GB	1141.3	1142.6	6.8	110.0			QL=6 ST=2 TYP=5
	6100	KISV	4	S/F	1141.3	1142.8	3.0	98.0			
	2695	ATHN	47	GB	1141.5	1142.6	6.6	52.0			QL=6 ST=2 TYP=5
	2650	DWIN	2	S/F	1142.0	1142.0	2.0	55.0	20.0		
	2695	SGMR	47	GB	1142.0	1142.8	2.6	59.0			QL=6 ST=2 TYP=5
	2950	GORK	8	S	1142.0	1142.8	3.0	38.0			
	3000	IZMI	5	S	1142.0	1143.0	3.0	43.0	20.0		
	8400	BERN	3	S	1142.0	1143.0	20.0	147.0			
	15000	KISV	4	S/F	1142.0	1143.0	3.0	47.0			
	11800	BERN	3	S	1142.0	1143.0	6.0D	138.0			
	8800	SGMR	47	GB	1142.1	1142.8	2.5	130.0			QL=6 ST=2 TYP=5
	9400	HUAN	4	S/F	1142.1	1142.9	3.4	122.1	60.9		L
	15400	SGMR	47	GB	1142.5	1143.0	1.6	58.0			QL=6 ST=2 TYP=5
	3100	CRIM	29		1144.0	1144.0	27.0	13.0	4.0		
	127	TORN	45	C	1159.8	1202.9	4.0	1400.0	140.0		
	4995	ATHN	4	S/F	1201.0	1204.0	5.5	29.0			QL=6 ST=2 TYP=3
	1415	ATHN	4	S/F	1201.3	1204.0	4.0	15.0			QL=6 ST=2 TYP=3
	2695	ATHN	4	S/F	1201.3	1204.0	4.0	18.0			QL=6 ST=2 TYP=3
	9400	HUAN	4	S/F	1201.9	1204.3	4.5	145.3	42.6		L
	3100	CRIM	45		1202.0	1203.4	3.0	16.0	5.0		
	8400	BERN	41	F	1202.0	1204.4	6.0	118.0			
	11800	BERN	41	F	1202.0	1204.4	6.0	263.0			
	19600	BERN	3	S	1202.0	1204.4	2.4U	77.0			
	3100	CRIM			1202.0	1204.5		10.0			
	2800	OTTA	45	C	1202.2	1203.5	4.0	14.4	5.0		
	6100	KISV			1202.3	1203.5		32.0			
	536	ONDR	41	F	1202.3	1203.7	5.0	48.0	12.0		
	6100	KISV	45	C	1202.3	1204.5	4.0	40.0U			
	650	GORK	4	S/F	1202.4	1204.3	3.6	21.0	9.5		
	930	BORD	46	C	1202.4	1204.6	4.6	30.0	6.0		
	410	SGMR	47	GB	1202.5	1203.3	3.0	330.0			QL=6 ST=2 TYP=5
	430	KRAK	45	C	1202.5	1204.5	4.5	78.0	35.0		
	245	SGMR	4	S/F	1202.6	1203.1	2.5	210.0			QL=6 ST=2 TYP=3
	810	KRAK	45	C	1202.6	1204.5	3.1	34.0	11.0		
	15000	KISV	2	S/F	1202.7	1203.4	1.5	25.0			
	950	GORK	46	C	1202.8	1203.7	3.8	23.0			
	950	GORK			1202.8	1204.6		24.0			
	610	SGMR	47	GB	1202.8	1204.6	2.8	50.0			QL=6 ST=2 TYP=5
	2650	DWIN	8	S	1203.0	1203.0	2.0	15.0	5.0		
	2950	GORK	45	C	1203.0	1203.6	2.1	12.4			
	15400	SGMR	47	GB	1203.0	1204.5	1.6	100.0			QL=6 ST=2 TYP=5
	2950	GORK			1203.0	1204.6		8.8			
	4995	SGMR	8	S	1203.1	1203.3	1.5	33.0			QL=6 ST=2 TYP=3
	8800	ATHN	47	GB	1203.1	1204.5	3.4	65.0			QL=6 ST=2 TYP=5
	8800	SGMR	47	GB	1203.1	1204.5	1.5	94.0			QL=6 ST=2 TYP=5
	1415	SGMR	8	S	1203.1	1204.6	1.5	19.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	1203.3	1203.3	.2	13.0			QL=6 ST=2 TYP=3
	15000	KISV	8	S	1204.3	1204.5	.8	122.0			
	430	KRAK	8	S	1233.2	1233.2	.2	34.0			
	810	KRAK	8	S	1233.2	1233.2	.2	16.0			
	930	BORD	41	F	1233.2	1233.2	.2	63.0	2.0		

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
10	6100	KISV	20 GRF	1308.0	1314.5	20.0	6.0			
	15000	KISV	21 GRF	1313.0	1327.3	15.0	36.0			
	930	BORD	8 S	1339.5	1339.5	.1	18.0	1.0		
	410	SGMR	8 S	1355.8	1356.0	1.0	34.0			QL=6 ST=2 TYP=3
	245	SGMR	47 GB	1355.8	1356.1	.3	100.0			QL=6 ST=2 TYP=5
	9400	HUAN	20 GRF	1501.2	1506.0	28.4	12.6	5.0		0
	245	SGMR	47 GB	1535.8	1536.1	1.0	52.0			QL=6 ST=2 TYP=5
	410	SGMR	8 S	1536.5	1536.6	1.3	29.0			QL=6 ST=2 TYP=3
	8800	ATHN	8 S	1544.1	1544.5	1.2	16.0			QL=6 ST=2 TYP=3
	2800	OTTA	240AR	1615.0	1710.0	55.0	6.6	3.3		
	2800	OTTA	20 GRF	1657.0	1701.0	12.0	5.0	2.5		
	2650	DWIN	GRF	1700.0	1715.0	30.0	25.0	10.0		
	930	BORD	46 C	1706.0	1707.5	2.5	20.0	6.0		
	410	PALE	8 S	1736.6	1737.3		27.0			QL=6 ST=3 TYP=3
	410	SGMR	8 S	1736.8	1737.3	.8	33.0			QL=6 ST=2 TYP=3
	410	SGMR	8 S	1742.1	1742.3	.2	13.0			QL=6 ST=2 TYP=3
	610	PALE	8 S	1749.8	1750.6	.8	30.0			QL=6 ST=2 TYP=3
	610	SGMR	8 S	1749.8	1750.6	1.3	27.0			QL=6 ST=2 TYP=3
	410	PALE	8 S	1751.3	1751.5	.5	20.0			QL=6 ST=2 TYP=3
	2800	OTTA	21 GRF	1755.0	2125.0	465.0	41.0	19.7		
	610	PALE	47 GB	1756.1	1758.3	9.5	119.0			QL=6 ST=2 TYP=5
	610	SGMR	47 GB	1756.1	1758.3	9.5	119.0			QL=6 ST=2 TYP=5
	245	SGMR	8 S	1756.6	1757.1	.7	21.0			QL=6 ST=2 TYP=3
	930	BORD	45 C	1758.0	1830.3	32.3D	387.0	30.0		
	2695	SGMR	8 S	1759.5	1800.0	.5D	20.0			QL=6 ST=2 TYP=3
	410	SGMR	4 S/F	1800.8	1801.3	2.5	34.0			QL=6 ST=2 TYP=3
	410	PALE	8 S	1801.1	1802.3	1.2D	20.0			QL=6 ST=2 TYP=3
	245	PALE	47 GB	1806.3	1809.1	11.7	100.0			QL=6 ST=2 TYP=5
	610	SGMR	8 S	1810.3	1810.6	.5	26.0			QL=6 ST=2 TYP=3
	410	SGMR	8 S	1810.3	1811.0	1.0	20.0			QL=6 ST=2 TYP=3
	245	SGMR	47 GB	1810.3	1811.8	1.8	80.0			QL=6 ST=2 TYP=5
	9400	HUAN	23 GRF	1821.7	1941.8	187.3	128.5	28.3		L
	410	PALE	49 GB	1824.0	1824.5	10.1	19.0			QL=6 ST=2 TYP=6
	610	PALE	49 GB	1824.1	1826.3	10.0	48.0			QL=6 ST=2 TYP=6
	610	SGMR	49 GB	1824.3	1827.3	16.2	64.0			QL=6 ST=2 TYP=6
	410	SGMR	49 GB	1824.3	1832.1	16.2	1500.0			QL=6 ST=2 TYP=6
	245	SGMR	49 GB	1824.8	1825.3	15.7	91.0			QL=6 ST=2 TYP=6
	245	PALE	49 GB	1829.1	1829.3	5.0	44.0			QL=6 ST=2 TYP=6
	2800	OTTA	46F C	1829.5	1838.5	12.0	23.6	11.8		
	4995	SGMR	47 GB	1829.8	1830.3	10.7	70.0			QL=6 ST=2 TYP=5
	4995	PALE	47 GB	1830.0	1830.3	4.1	61.0			QL=6 ST=2 TYP=5
	9400	HUAN	4 S/F	1830.0	1830.4	2.0	111.6	40.0		0
	1415	PALE	47 GB	1830.1	1830.1	.4	169.0			QL=6 ST=2 TYP=5
	1415	SGMR	47 GB	1830.1	1830.3	10.4	180.0			QL=6 ST=2 TYP=5
	8800	PALE	47 GB	1830.1	1830.3	2.0	119.0			QL=6 ST=2 TYP=5
	2695	SGMR	4 S/F	1830.1	1830.3	10.4	29.0			QL=6 ST=2 TYP=3
	8800	SGMR	47 GB	1830.1	1830.3	10.4	110.0			QL=6 ST=2 TYP=5
	15400	PALE	47 GB	1830.1	1830.3	4.0	52.0			QL=6 ST=2 TYP=5
	15400	SGMR	47 GB	1830.1	1830.3	10.4	71.0			QL=6 ST=2 TYP=5
	610	PALE	49 GB	1834.1	1834.3	10.2	1800.0			QL=6 ST=2 TYP=6
	245	PALE	47 GB	1834.1	1834.3	10.2	92.0			QL=6 ST=2 TYP=5
	2695	PALE	20 GRF	1834.1	1834.3	.2	13.0			QL=6 ST=2 TYP=2
	15400	PALE	20 GRF	1834.1	1834.3	10.2	23.0			QL=6 ST=2 TYP=2
	4995	PALE	20 GRF	1834.1	1834.3	10.2	20.0			QL=6 ST=2 TYP=2
	1415	PALE	8 S	1834.5	1834.6	.1	11.0			QL=6 ST=2 TYP=3
	8800	PALE	8 S	1834.6	1834.8	.2	13.0			QL=6 ST=2 TYP=3
	9400	HUAN	2 S/F	1837.0	1838.0	3.5	19.0	8.1		0
	610	PALE	20 GRF	1844.3	1844.3	10.8	43.0			QL=6 ST=2 TYP=2
	15400	PALE	20 GRF	1844.3	1844.3	10.8	33.0			QL=6 ST=2 TYP=2
	4995	PALE	20 GRF	1844.3	1844.6	10.8	16.0			QL=6 ST=2 TYP=2
	245	PALE	49 GB	1844.3	1845.6	10.8	169.0			QL=6 ST=2 TYP=6
	410	PALE	20 GRF	1844.3	1846.3	10.8	40.0			QL=6 ST=2 TYP=2
	2695	PALE	8 S	1848.8	1849.8	1.0D	13.0			QL=6 ST=2 TYP=3
	8800	PALE	47 GB	1849.5	1849.8	2.8	16.0			QL=6 ST=2 TYP=5
	9400	HUAN	4 S/F	1849.5	1851.6	3.5	37.9	16.0		L
	9400	HUAN		1849.5	1852.0		36.8			L
	2800	OTTA	1 S	1851.0	1852.0	2.0	3.2	1.6		
	610	PALE	47 GB	1903.6	1903.8	8.2	100.0			QL=6 ST=2 TYP=5
	410	PALE	47 GB	1903.6	1903.8	8.2	130.0			QL=6 ST=2 TYP=5
	245	PALE	49 GB	1903.6	1905.8	4.5	600.0			QL=6 ST=2 TYP=6

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
10	2800	OTTA	1	S	1904.0	1907.0	6.0	4.8	2.6		
	245	PALE	49	GB	1911.8	1911.8	12.0	239.0			QL=6 ST=3 TYP=6
	410	PALE	47	GB	1911.8	1913.8		82.0			QL=6 ST=3 TYP=5
	610	PALE	47	GB	1911.8	1913.8	12.0	74.0			QL=6 ST=3 TYP=5
	2800	OTTA	1	S	1912.0	1914.2	8.0	8.4	4.0		
	1415	PALE	47	GB	1913.6	1913.8		30.0			QL=6 ST=3 TYP=5
	100	HIRA	48	C	1915.0E	2001.0U	405.0D	6400.0	880.0		MR
	200	HIRA	48	C	1915.0E	2001.0U	400.0D	780.0	90.0		MR
	1415	SGMR	47	GB	1925.8	1925.8	9.5	30.0			QL=6 ST=2 TYP=5
	4995	SGMR	47	GB	1925.8	1926.1	9.5	21.0			QL=6 ST=2 TYP=5
	15400	SGMR	47	GB	1925.8	1926.1	9.5	44.0			QL=6 ST=2 TYP=5
	2695	SGMR	47	GB	1925.8	1926.6	9.5	37.0			QL=6 ST=2 TYP=5
	410	SGMR	47	GB	1925.8	1927.3	9.5	87.0			QL=6 ST=2 TYP=5
	610	SGMR	47	GB	1925.8	1927.5	9.5	80.0			QL=6 ST=2 TYP=5
	245	SGMR	47	GB	1925.8	1927.6	9.5	290.0			QL=6 ST=2 TYP=5
	410	PALE	8	S	1926.8	1927.3	1.3	41.0			QL=6 ST=2 TYP=3
	245	PALE	47	GB	1927.1	1927.5	15.0	169.0			QL=6 ST=2 TYP=5
	610	PALE	8	S	1927.3	1927.5	.3	13.0			QL=6 ST=2 TYP=3
	1415	PALE	47	GB	1929.1	1932.3	13.0	39.0			QL=6 ST=2 TYP=5
	2800	OTTA	3	S	1931.0	1945.0	70.0	305.0	103.0		
	4995	PALE	47	GB	1932.1	1932.3	10.0	16.0			QL=6 ST=2 TYP=5
	2695	PALE	47	GB	1932.1	1932.3	10.0	13.0			QL=6 ST=2 TYP=5
	15400	PALE	47	GB	1933.3	1938.5	8.8	66.0			QL=6 ST=2 TYP=5
	8800	SGMR	47	GB	1933.8	1934.3	1.5	74.0			QL=6 ST=2 TYP=5
	8800	PALE	47	GB	1933.8	1938.6	8.3	78.0			QL=6 ST=2 TYP=5
	500	HIRA	45	C	1938.0E	1951.6	41.0D	75.0	45.0		WR
	410	SGMR	47	GB	1939.8	1940.0	27.8	93.0			QL=6 ST=2 TYP=5
	245	SGMR	4	S/F	1939.8	1940.0	27.8	360.0			QL=6 ST=2 TYP=3
	610	SGMR	47	GB	1939.8	1941.0	27.8	219.0			QL=6 ST=2 TYP=5
	1415	SGMR	47	GB	1939.8	1941.6	27.8	490.0			QL=6 ST=2 TYP=5
	4995	SGMR	47	GB	1939.8	1941.8	27.8	260.0			QL=6 ST=2 TYP=5
	2695	SGMR	47	GB	1939.8	1941.8	27.8	310.0			QL=6 ST=2 TYP=5
	8800	SGMR	47	GB	1939.8	1941.8	27.8	180.0			QL=6 ST=2 TYP=5
	15400	SGMR	47	GB	1939.8	1941.8	27.8	110.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	1942.1	1942.1	8.2	139.0			QL=6 ST=2 TYP=5
	610	PALE	47	GB	1942.1	1942.1	21.5	169.0			QL=6 ST=2 TYP=5
	1415	PALE	47	GB	1942.1	1942.1	21.5	420.0			QL=6 ST=2 TYP=5
	8800	PALE	47	GB	1942.1	1942.3	21.5	119.0			QL=6 ST=2 TYP=5
	15400	PALE	47	GB	1942.1	1942.8	21.5	90.0			QL=6 ST=2 TYP=5
	410	PALE	47	GB	1942.1	1943.5	6.0	30.0			QL=6 ST=2 TYP=5
	2695	PALE	47	GB	1942.1	1943.5	21.5	280.0			QL=6 ST=2 TYP=5
	4995	PALE	47	GB	1942.1	1943.5	21.5	230.0			QL=6 ST=2 TYP=5
	4995	SGMR	47	GB	2007.6	2007.6	30.4	88.0			QL=6 ST=2 TYP=5
	245	SGMR	4	S/F	2007.6	2007.6	33.5	160.0			QL=6 ST=2 TYP=3
	1415	SGMR	47	GB	2007.6	2007.6	30.4	100.0			QL=6 ST=2 TYP=5
	15400	SGMR	20	GRF	2007.6	2007.8	15.2	57.0			QL=6 ST=2 TYP=2
	410	SGMR	20	GRF	2007.6	2007.8	.9	22.0			QL=6 ST=2 TYP=2
	610	SGMR	47	GB	2007.6	2007.8	19.9	77.0			QL=6 ST=2 TYP=5
	2695	SGMR	47	GB	2007.6	2007.8	30.4	110.0			QL=6 ST=2 TYP=5
	8800	SGMR	47	GB	2007.6	2007.8	29.7	73.0			QL=6 ST=2 TYP=5
	1000	TYKW	21	GRF	2058.0E	2111.0	340.0D	15.0	7.0D		
	3750	TYKW	21	GRF	2058.0E	2112.0U	270.0D	38.0	18.0D		
	9400	TYKW	21	GRF	2100.0E	2100.0U	290.0D	60.0D	25.0D		
	2000	TYKW	20	GRF	2100.0E	2125.0	310.0D	35.0	17.0D		
	1000	TYKW	45	C	2114.0	2130.4	30.0	13.0	5.0		
	610	SGMR	8	S	2121.6	2123.6	2.0D	22.0			QL=6 ST=2 TYP=3
	1415	SGMR	4	S/F	2121.8	2124.1	2.8	24.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	2156.0	2157.0	4.0	28.0	5.0		
	2000	TYKW	5	S	2156.0	2157.0	2.0	8.0	2.0		
	1000	TYKW	5	S	2156.0	2157.0	3.0	2.0	.7		
	9400	TYKW	5	S	2156.7	2157.0	2.5	18.0	5.0		
	2800	OTTA	3	S	2156.8	2156.9	2.2	24.0	10.0		
	2000	TYKW	5	S	2159.5	2201.0	8.0	3.0	1.5		
	9400	TYKW	20	GRF	2215.0	2235.0	55.0	6.0	3.0		
	410	PALE	47	GB	2233.0	2234.1	17.0	100.0			QL=6 ST=2 TYP=5
	410	SGMR	47	GB	2238.8	2247.0	27.0	280.0			QL=6 ST=2 TYP=5
	3750	TYKW	5	S	2244.0	2250.0	16.0	4.0	1.5		
	410	SGMR	47	GB	2305.8	2306.5	16.3	100.0			QL=6 ST=2 TYP=5
	3750	TYKW	5	S	2315.0	2323.0	15.0	2.0	1.0		
	1000	TYKW	45	C	2317.0	2317.3	1.0	2.0	1.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
10	410	SGMR	47	GB	2322.1	2322.1	9.4	169.0			QL=6 ST=2 TYP=5
	410	SGMR	47	GB	2333.6	2335.0	4.5	72.0			QL=6 ST=2 TYP=5
	410	PALE	47	GB	2334.0	2334.6	5.1	70.0			QL=6 ST=2 TYP=5
	100	HIRA	42	SER	2358.7	0003.0	8.7	5000.0			WL
11	200	HIRA	44	NS	0200.0E	0333.0	470.0D	20.0	15.0		0
	260	ONDR	44	NS	0546.0E	0855.0U	514.0D	8.0			
	127	TORN	43	NS	0636.0		304.0		6.0		V1,DISTURBED
	33	UPIC	43	NS	0702.0		481.3				
	245	SGMR	43	NS	0929.0	1552.0	867.0D	320.0			QL=6 ST=2 TYP=1
	410	PALE	43	NS	1631.0	2054.1	735.0D	400.0			QL=6 ST=2 TYP=1
	245	PALE	43	NS	1631.0	2241.6	735.0D	280.0			QL=6 ST=2 TYP=1
	410	SGMR	43	NS	1809.0	2236.1	347.0D	169.0			QL=6 ST=2 TYP=1
	200	HIRA	44	NS	1915.0E	2031.0	825.0D	170.0	60.0		ML
	100	HIRA	44	NS	1915.0E	2032.0	825.0D	1500.0	150.0		ML
	208	VORO	44	NS	2100.0E		360.0D		40.0		
	500	HIRA	41	F	0100.8	0105.6	5.3	65.0			SL
	410	LEAR	47	GB	0105.5	0105.8	.5	110.0			QL=6 ST=2 TYP=5
	245	LEAR	8	S	0105.6	0105.8	.4	23.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0105.6	0105.8	.4	13.0			QL=6 ST=2 TYP=3
	2000	TYKW	5	S	0151.6	0152.2	1.5	1.5	.5		
	3750	TYKW	45	C	0212.0	0214.5	12.0	10.0	4.0		
	2930	VORO	3	S	0220.0	0223.0	10.0	246.0			
	2840	PEKG	3	S	0223.8	0224.8	2.2	44.0	36.0		
	2000	TYKW	5	S	0224.0	0224.7	4.0	147.0	30.0		
	3750	TYKW	5	S	0224.0	0224.7	4.0	229.0	45.0		
	9400	TYKW	5	S	0224.0	0224.7	3.0	70.0	16.0		
	1000	TYKW	45	C	0224.0	0225.2	4.0	88.0	20.0		
	500	HIRA	45	C	0224.0	0224.0	3.0	85.0	40.0		0
	9395	PEKG	3	S	0224.0	0224.7	12.0	69.0	7.1		
	410	PALE	47	GB	0224.1	0224.3	.5	130.0			QL=6 ST=3 TYP=5
	410	LEAR	47	GB	0224.1	0224.3	6.5	139.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	0224.1	0224.3	.7	490.0			QL=6 ST=2 TYP=5
	4995	MANI	3	S	0224.1	0224.4	2.9	249.0	83.0		
	2695	MANI	3	S	0224.1	0224.5	2.9	233.5	77.8		
	8800	MANI	3	S	0224.1	0224.5	1.4	88.2	29.4		
	2695	PALE	47	GB	0224.1	0224.6	1.9	200.0			QL=6 ST=2 TYP=5
	1415	LEAR	47	GB	0224.1	0224.6	3.5	90.0			QL=6 ST=2 TYP=5
	1415	MANI	3	S	0224.1	0224.6	2.7	81.8	27.3		
	4995	LEAR	47	GB	0224.1	0224.6	9.2	200.0			QL=6 ST=2 TYP=5
	8800	PALE	47	GB	0224.1	0224.6	1.2	87.0			QL=6 ST=2 TYP=5
	4995	PALE	47	GB	0224.1	0224.6	1.5	200.0			QL=6 ST=2 TYP=5
	1415	PALE	47	GB	0224.1	0224.6	1.5	94.0			QL=6 ST=2 TYP=5
	2695	LEAR	47	GB	0224.1	0224.6	3.0	219.0			QL=6 ST=2 TYP=5
	606	MANI	4	S/F	0224.1	0225.1	2.0	102.0	34.0		
	610	PALE	47	GB	0224.1	0225.1	1.5	110.0			QL=6 ST=2 TYP=5
	610	LEAR	47	GB	0224.1	0225.1	3.0	119.0			QL=6 ST=2 TYP=5
	245	LEAR	47	GB	0224.3	0224.3	1.3	320.0			QL=6 ST=2 TYP=5
	15400	PALE	4	S/F	0224.3	0224.6	2.7	30.0			QL=6 ST=3 TYP=3
	15400	LEAR	4	S/F	0224.8E	0224.8	3.0D	15.0			QL=5 ST=2 TYP=3
	8800	LEAR	8	S	0225.3E	0225.3	1.8D	22.0			QL=5 ST=2 TYP=3
	9400	TYKW	29	PBI	0227.0		13.0	5.0	2.0		
	2000	TYKW	29	PBI	0228.0		6.0	2.0	1.0		
	1000	TYKW	29	PBI	0228.0		6.0	1.5	.7		
	3750	TYKW	29	PBI	0228.0		25.0	5.0	2.0		
	610	LEAR	8	S	0238.8	0238.8	.2	11.0			QL=6 ST=2 TYP=3
	610	LEAR	47	GB	0241.6	0241.8	.5	320.0			QL=6 ST=2 TYP=5
	410	LEAR	47	GB	0241.8	0241.8	.3	53.0			QL=6 ST=2 TYP=5
	2000	TYKW	45	C	0247.0	0249.5	5.0	2.0	.7		
	1000	TYKW	45	C	0308.0	0308.7	4.0	3.5	.7		
	3750	TYKW	5	S	0312.7	0313.3	5.0	2.0	.5		
	9400	TYKW	5	S	0328.0	0328.4	1.5	5.0	2.0		
	3750	TYKW	45	C	0333.0	0338.4	15.0	3.0	1.0		
	9100	GORK	23	GRF	0345.0E		498.0D				
	410	PALE	8	S	0347.8	0348.3	1.0	21.0			QL=6 ST=2 TYP=3
	500	HIRA	45	C	0403.1	0403.3	.5	24.0	14.0		SL
	9400	TYKW	21	GRF	0415.0	0422.0	50.0	5.0	2.0		
	3750	TYKW	21	GRF	0420.0	0513.0	100.0	8.0	3.0		
	3750	TYKW	5	S	0420.0	0420.1	.6	3.0	1.0		
	9400	TYKW	5	S	0431.5	0432.0	1.0	9.0	3.0		

SOLAR RADIO EMISSION
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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
11	9400	TYKW	29	PBI	0432.5		13.0	4.0	2.0		
	9100	GORK	2	S/F	0442.0	0442.6	2.0	9.5			
	2950	GORK	21	GRF	0442.5	1139.0	697.0D	3.6			
	650	GORK	21	GRF	0444.4	0451.8	10.4	1.5			
	6100	KISV	21	GRF	0444.5	0448.5	16.0	9.0			
	4995	LEAR	4	S/F	0446.8	0448.1	2.2	8.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	0447.5	0448.0	1.5	3.0	1.0		
	9400	TYKW	5	S	0447.5	0448.2	1.5	10.0	5.0		
	15400	LEAR	8	S	0447.8	0448.1	.7	10.0			QL=6 ST=2 TYP=3
	8800	LEAR	8	S	0448.0	0448.1	1.5	16.0			QL=6 ST=2 TYP=3
	650	GORK	1	S	0448.2	0448.4	.7	6.1			
	9400	TYKW	29	PBI	0449.0		13.0	4.0	1.5		
	650	GORK	1	S	0450.5	0450.6	.4	3.6			
	650	GORK	1	S	0453.7	0454.0	1.0	4.6			
	3750	TYKW	5	S	0454.0	0457.0	8.0	4.0	1.5		
	4995	LEAR	4	S/F	0456.1	0457.5	4.2	13.0			QL=6 ST=2 TYP=3
	9100	GORK	1	S	0458.2	0458.6	1.8	8.8	4.0		
	2000	TYKW	21	GRF	0505.0	0527.0	55.0	3.0	1.5		
	2000	TYKW	5	S	0533.5	0534.0	1.5	3.0	1.0		
	2950	GORK	1	S	0533.5	0534.0	1.5	4.8			
	3750	TYKW	5	S	0533.5	0534.0	1.5	4.0	1.5		
	1000	TYKW	5	S	0543.0	0543.3	1.0	4.0	.7		
	500	HIRA	45	C	0544.6	0544.9	.6	45.0	28.0		WL
	1000	TYKW	45	C	0545.0	0545.1	1.5	4.0	.5		
	2000	TYKW	5	S	0600.0	0602.5	5.0D	2.0	1.0D		
	9400	TYKW	21	GRF	0630.0	0805.0	160.0D	36.0	27.0D		
	500	HIRA	41	F	0637.3	0637.4	6.0	300.0			WL
	536	ONDR	42	SER	0637.9	0639.8	8.9	41.0			
	9400	TYKW	45	C	0639.0	0645.6	11.0	27.0	6.0		
	3750	TYKW	21	GRF	0639.0	0740.0	140.0D	20.0	13.0D		
	9100	GORK	46	C	0639.2	0642.7	10.5	12.0			
	9100	GORK			0639.2	0645.8		28.0			
	6100	KISV	27	RF	0639.3	0645.9		15.0			
	3750	TYKW	5	S	0639.5	0639.8	1.5	3.0	1.0		
	2000	TYKW	21	GRF	0643.0	0800.0	140.0D	11.0	7.0D		
	3750	TYKW	5	S	0644.5	0646.0	4.5	4.0	1.5		
	8800	MANI	3	S	0645.0	0645.4	.7	28.1	9.4		
	4995	MANI	3	S	0645.0	0645.4	.7	16.9	5.6		
	8800	ATHN	4	S/F	0645.1	0646.0	2.7	16.0			QL=6 ST=2 TYP=3
	8800	LEAR	4	S/F	0645.3	0645.6	2.7	26.0			QL=6 ST=2 TYP=3
	4995	ATHN	8	S	0645.3	0645.6	2.0	6.0			QL=6 ST=2 TYP=3
	15000	KISV	1	S	0645.4	0645.9	1.5	16.0			
	9400	TYKW	29	PBI	0650.0		8.0	4.0	2.0		
	1000	TYKW	21	GRF	0650.0	0800.0	130.0D	3.0	2.0D		
	9100	GORK	1	S	0656.7	0657.0	.5	4.7	2.0		
	430	KRAK	42	SER	0705.0	0758.3	53.4	190.0			
	536	ONDR	42	SER	0754.7	0756.9	5.0	21.0			
	3750	TYKW	5	S	0756.5	0756.8	1.5	5.0	1.5		
	2000	TYKW	5	S	0756.5	0757.0	2.0	4.0	1.0		
	950	GORK	21	GRF	0756.5	1133.9	480.0D	83.0			
	1000	TYKW	45	C	0756.7	0757.1	3.0	5.0	1.0		
	650	GORK	2	S/F	0756.7	0759.0	4.0	3.0			
	930	BORD	8	S	0803.2	0803.2	.2	65.0	1.0		
	536	ONDR	2	S/F	0824.8	0825.9	2.0	32.0	31.0		
	650	GORK	40	F	0825.0	0826.1	2.6	4.0			
	810	KRAK	8	S	0841.6	0841.6	.2	13.0			
	3100	CRIM	25	R	0844.0	1012.0		26.0			
	650	GORK	23	GRF	0845.0	0903.0	195.0D	3.2			
	2950	GORK	1	S	0856.7	0857.0	1.0	4.8			
	204	IZMI	4	S/F	0858.0	0858.2	.4	133.0			
	650	GORK	40	F	0858.6	0902.3	7.8	9.7			
	950	GORK	2	S/F	0900.0	0902.4	5.3	13.6			
	950	GORK			0900.0	0904.0		13.6			
	6100	KISV	27	RF	0900.5	0904.0	8.0	16.0			
	536	ONDR	42	SER	0900.5	0904.7	10.8	10.0			
	808	ONDR	40	F	0901.8	0902.4	4.8	12.0	7.0		
	808	ONDR	40	F	0901.8E	0902.4U	4.8D	12.0	7.0		
	930	BORD	41	F	0902.0	0902.6	3.0	20.0	2.0		
	9100	GORK	2	S/F	0902.3	0903.9	2.2	6.8			
	430	KRAK	42	SER	0907.1	0910.1	45.3	350.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
11	430	KRAK			0907.1	0948.7		600.0D			
	2950	GORK	1	S	0912.0	0912.5	1.5	5.9			
	6100	KISV	27	RF	0923.5	0927.6	8.5	10.0			
	3100	CRIM	1	S	0925.0	0927.5	6.0	11.0	4.0		
	2950	GORK	1	S	0927.0	0927.8	1.5	4.8			
	2950	GORK	1	S	0934.7	0935.0	.7	4.8			
	808	ONDR	42	SER	0944.5	0944.6	7.7	32.0			
	930	BORD	42	SER	0944.6	0944.7	7.4	4.5	2.0		
	536	ONDR	42	SER	0944.7	0944.8	8.6	29.0			
	810	KRAK	42	SER	0944.7	0945.0	5.0	100.0			
	204	IZMI	41	F	0946.5	0947.0	1.3	200.0			
	410	SGMR	47	GB	0948.3	0948.5	.3	71.0			QL=6 ST=2 TYP=5
	2950	GORK	1	S	1019.0	1019.6	2.0	7.0			
	930	BORD	8	S	1019.5	1019.5	.1	30.0	1.0		
	536	ONDR	41	F	1039.4	1041.0	6.4	24.0	7.0		
	2800	OTTA	21	GRF	1100.0	1254.0	295.0	18.4	7.6		
	8400	BERN	4	S/F	1108.0	1109.3	9.0	120.0			
	9100	GORK	4	S/F	1108.6	1109.3	4.3	130.0			
	15400	SGMR	47	GB	1108.8	1109.3	3.2	400.0			QL=6 ST=2 TYP=5
	19600	BERN	4	S/F	1108.8	1109.3	3.0U	375.0			
	8800	SGMR	47	GB	1109.0	1109.3	1.8	100.0			QL=6 ST=2 TYP=5
	4995	SGMR	8	S	1109.0	1109.3	2.0	23.0			QL=6 ST=2 TYP=3
	8800	ATHN	47	GB	1109.0	1109.5	7.0	100.0			QL=6 ST=2 TYP=5
	4995	ATHN	4	S/F	1109.0	1110.0	7.0	18.0			QL=6 ST=2 TYP=3
	430	KRAK			1129.6	1133.7		130.0			
	430	KRAK	42	SER	1129.6	1140.8	91.0	110.0			
	204	IZMI	41	F	1138.0	1140.5	11.0	250.0			
	410	SGMR	47	GB	1139.3	1140.8	1.8	70.0			QL=6 ST=2 TYP=5
	245	SGMR	47	GB	1140.3	1140.6	.5	200.0			QL=6 ST=2 TYP=5
	650	GORK	3	S	1140.4	1140.7	1.5	6.5			
	2695	SGMR	8	S	1140.8	1141.3	.5D	13.0			QL=6 ST=2 TYP=3
	650	GORK	4	S/F	1144.3	1145.0	2.5	11.0			
	8800	ATHN	4	S/F	1249.3	1251.6	5.8	10.0			QL=6 ST=2 TYP=3
	245	SGMR	49	GB	1251.8	1251.8	.5	1000.0			QL=6 ST=2 TYP=6
	410	SGMR	47	GB	1251.8	1252.3	.7	51.0			QL=6 ST=2 TYP=5
	4995	SGMR	8	S	1252.6	1252.8	.2	17.0			QL=6 ST=2 TYP=3
	2800	OTTA	1	S	1346.2	1347.5	2.0	8.4	3.0		
	930	BORD	46	C	1347.0	1347.6	1.4	32.0	14.0		
	1415	ATHN	8	S	1347.1	1347.8	1.0	46.0			QL=6 ST=2 TYP=3
	2695	ATHN	8	S	1347.1	1347.8	.9	11.0			QL=6 ST=2 TYP=3
	410	SGMR	47	GB	1347.3	1347.6	.5	290.0			QL=6 ST=2 TYP=5
	1415	SGMR	8	S	1347.3	1347.6	.8	32.0			QL=6 ST=2 TYP=3
	610	SGMR	8	S	1347.5	1347.6	.1	36.0			QL=6 ST=2 TYP=3
	808	ONDR	8	S	1347.6	1347.9	1.2	15.0			
	536	ONDR	8	S	1347.8	1349.0	1.2U	18.0			
	2650	DWIN	1	S	1348.0	1348.0	1.0	18.0	8.0		
	2800	OTTA	45	C	1455.0	1458.8	10.0	80.0	26.2		
	2650	DWIN	4	S/F	1455.0	1459.0	6.0	65.0	30.0		
	4995	SGMR	47	GB	1455.6	1500.6	16.7	139.0			QL=6 ST=2 TYP=5
	8400	BERN	4	S/F	1456.0	1500.5	20.0	119.0			
	2695	SGMR	47	GB	1456.5	1459.1	6.5	99.0			QL=6 ST=2 TYP=5
	245	SGMR	47	GB	1457.8	1458.8	1.8	360.0			QL=6 ST=2 TYP=5
	930	BORD	46	C	1458.0	1500.8	6.0	28.0	6.0		
	1415	SGMR	4	S/F	1458.3	1459.1	4.2	36.0			QL=6 ST=2 TYP=3
	8800	SGMR	47	GB	1458.3	1500.6	7.7	110.0			QL=6 ST=2 TYP=5
	2695	ATHN	47	GB	1458.5	1459.1	5.8	61.0			QL=6 ST=2 TYP=5
	1415	ATHN	4	S/F	1458.5	1459.1	5.0	18.0			QL=6 ST=2 TYP=3
	4995	ATHN	47	GB	1458.5	1500.5	9.3	110.0			QL=6 ST=2 TYP=5
	8800	ATHN	47	GB	1458.5	1500.5	22.8	100.0			QL=6 ST=2 TYP=5
	19600	BERN	4	S/F	1458.5	1500.5	5.0D	30.0			
	410	SGMR	47	GB	1458.5	1500.6	7.8	130.0			QL=6 ST=2 TYP=5
	15400	SGMR	47	GB	1458.6	1500.8	8.7	83.0			QL=6 ST=2 TYP=5
	610	SGMR	8	S	1502.1	1502.1	.2	36.0			QL=6 ST=2 TYP=3
	410	SGMR	8	S	1530.3	1530.5	.3	21.0			QL=6 ST=2 TYP=3
	2800	OTTA	22	GRF	1617.0	1635.0	45.0	4.0	2.0		
	245	PALE	49	GB	1716.6	1718.6	4.2	5000.0			QL=6 ST=2 TYP=6
	410	PALE	47	GB	1716.6	1718.6	2.4	239.0			QL=6 ST=2 TYP=5
	2800	OTTA	3	S	1718.3	1718.9	1.5	13.8	4.8		
	2695	SGMR	8	S	1718.8	1719.0	.3	18.0			QL=6 ST=2 TYP=3
	410	SGMR	8	S	1748.0	1748.1	.1	20.0			QL=6 ST=2 TYP=3

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
11	245	SGMR	47	GB	1748.1	1748.3	.4	180.0			QL=6 ST=2 TYP=5
	2800	OTTA	21	GRF	1755.0	1848.0	245.0	44.0	19.6		
	2800	OTTA	3	S	1814.0	1817.2	7.0	83.0	27.8		
	410	SGMR	8	S	1814.6	1815.1	.7	20.0			QL=6 ST=2 TYP=3
	2650	DWIN	4	S/F	1815.0	1817.0	5.0	65.0	30.0		
	2695	SGMR	47	GB	1815.0	1817.1	11.8	92.0			QL=6 ST=2 TYP=5
	610	SGMR	8	S	1815.1	1815.3	.2	20.0			QL=6 ST=2 TYP=3
	2695	PALE	47	GB	1815.3	1817.3	4.0	64.0			QL=6 ST=2 TYP=5
	4995	SGMR	47	GB	1815.5	1817.1	11.3	200.0			QL=6 ST=2 TYP=5
	4995	PALE	47	GB	1815.5	1817.3	7.3	210.0			QL=6 ST=2 TYP=5
	8800	PALE	47	GB	1816.3	1817.1	2.5	76.0			QL=6 ST=2 TYP=5
	8800	SGMR	47	GB	1816.6	1817.1	1.2	57.0			QL=6 ST=2 TYP=5
	1415	SGMR	8	S	1817.0	1817.1	1.8	20.0			QL=6 ST=2 TYP=3
	1415	PALE	8	S	1817.1	1817.3	1.7	16.0			QL=6 ST=2 TYP=3
	2650	DWIN		PBI	1820.0	1820.0					SUNSET
	9400	HUAN	21	GRF	1839.2	1903.0	102.2	18.1	10.5		R
	4995	PALE	47	GB	1839.8	1842.3	11.2	61.0			QL=6 ST=2 TYP=5
	2695	PALE	4	S/F	1839.8	1843.6	11.2	28.0			QL=6 ST=2 TYP=3
	2800	OTTA	1	S	1840.0	1842.5	4.5	9.6	6.4		
	4995	SGMR	4	S/F	1841.0	1842.1	2.8	36.0			QL=6 ST=2 TYP=3
	9400	HUAN	1	S	1841.0	1842.2	3.3	14.8	8.5		R
	8800	PALE	4	S/F	1841.1	1842.1	7.5	28.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	1842.3	1843.1	1.3	17.0			QL=6 ST=2 TYP=3
	9400	HUAN	1	S	1853.8	1855.7	3.2	11.5	6.9		0
	15400	SGMR	8	S	2009.1	2009.3	.4	37.0			QL=6 ST=2 TYP=3
	2800	OTTA	8	S	2021.1	2021.3	.8	2.6	1.3		
	2800	OTTA	1	S	2027.0	2027.5	2.0	3.0	1.5		
	410	SGMR	49	GB	2043.1	2044.0	1.0	690.0			QL=6 ST=2 TYP=6
	410	PALE	49	GB	2043.3	2044.0	.8	1199.0			QL=6 ST=2 TYP=6
	610	PALE	8	S	2043.[illegible]	2044.0	.8	39.0			QL=6 ST=2 TYP=3
	9400	HUAN	1	S	2053.[illegible]	2054.4	2.1	11.5	3.9		0
	1000	TYKW	42	SER	2055.5	2055.9	4.5D	27.0	2.0D		
	9400	HUAN	2	S/F	2113.9	2114.6	2.4	4.9	3.3		0
	1000	TYKW	8	S	2117.6	2117.8	.4	5.0	1.0		
	9400	TYKW	21	GRF	2118.0	2205.0	260.0	6.0	3.0		
	3750	TYKW	21	GRF	2120.0	2205.0	145.0	4.0	2.0		
	9400	HUAN	2	S/F	2120.2	2121.0	1.8	6.6	2.5		0
	1000	TYKW	8	S	2121.2	2121.3	.2	2.0	.5		
	9400	TYKW	45	C	2122.0	2124.3	5.0	16.0	4.0		
	9400	HUAN	2	S/F	2122.6	2124.8	3.4	13.1	4.7		0
	2000	TYKW	5	S	2123.0	2123.4	1.0	6.0	1.5		
	208	VORO	46	C	2123.0	2123.0	2.0	200.0D			
	100	HIRA	8	S	2123.0	2123.3	.5	4300.0			0
	410	PALE	47	GB	2123.1	2123.3	1.7	11.0			QL=6 ST=2 TYP=5
	245	PALE	49	GB	2123.1	2123.3	1.7	1899.0			QL=6 ST=2 TYP=6
	1000	TYKW	5	S	2123.2	2123.4	.6	2.0	.7		
	245	SGMR	49	GB	2123.3	2123.3	1.5	1899.0			QL=6 ST=2 TYP=6
	200	HIRA	46	C	2123.3	2124.1	1.7	4000.0	630.0		0
	2000	TYKW	5	S	2124.0	2124.7	1.5	1.5	.5		
	8800	PALE	8	S	2124.1	2124.3	.2	19.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	2129.8	2130.1	1.0	2.0	.7		
	9400	TYKW	8	S	2129.9	2130.0	.4	9.0	3.0		
	9400	TYKW	5	S	2143.5	2145.0	5.0	3.0	1.0		
	3750	TYKW	5	S	2146.0	2146.7	4.0	4.0	1.0		
	2000	TYKW	5	S	2146.0U	2146.7	6.0U	3.0	1.0U		
	500	HIRA	8	S	2146.2	2146.5	.4	450.0			WL
	1000	TYKW	8	S	2146.6	2146.7	.4	3.0	1.0		
	2800	OTTA	1	S	2146.7	2146.7	2.0	3.8	1.6		
	1000	TYKW	8	S	2204.3	2204.4	.3	38.0	8.0		
	8800	MANI	4	S/F	2205.0	2206.7	3.0	52.4	17.5		
	2800	OTTA	3	S	2205.5	2206.1	5.0	21.0	7.0		
	8800	SGMR	4	S/F	2205.5	2206.1	2.3	32.0			QL=6 ST=2 TYP=3
	9400	TYKW	45	C	2205.5	2206.2	4.5	63.0	12.0		
	2000	TYKW	5	S	2205.5	2206.3	4.5	13.0	5.0		
	3750	TYKW	5	S	2205.5	2206.3	3.5	30.0	12.0		
	9400	HUAN	3	S	2205.5	2206.3	2.7	50.9	20.0		R
	2695	SGMR	4	S/F	2205.8	2206.1	2.5	22.0			QL=6 ST=2 TYP=3
	1000	TYKW	8	S	2206.0	2206.1	.2	165.0	25.0		
	4995	MANI	3	S	2206.0	2206.7	1.0	13.5	4.5		
	1415	MANI	3	S	2206.0	2206.8	1.3	67.3	22.4		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
11	4995	SGMR	8	S	2206.1	2206.1	.2	30.0			QL=6 ST=2 TYP=3
	1415	SGMR	47	GB	2206.1	2206.5	1.5	52.0			QL=6 ST=2 TYP=5
	2695	MANI	3	S	2206.1	2206.7	2.2	21.4	7.1		
	1000	TYKW	8	S	2207.0	2207.1	.2	4.0	1.0		
	3750	TYKW	29	PBI	2209.0		15.0	4.0	2.0		
	2000	TYKW	29	PBI	2210.0		9.0	3.0	1.0		
	9400	TYKW	29	PBI	2210.0		10.0	5.0	2.0		
	9400	TYKW	5	S	2225.0	2226.0	3.0	15.0	5.0		
	3750	TYKW	21	GRF	2225.0	2229.5	35.0	5.0	2.0		
	1000	TYKW	45	C	2227.5	2228.1	1.5	12.0	2.5		
	9400	TYKW	30	PBI	2228.0		57.0	5.0	2.0		
	2000	TYKW	45	C	2239.0	2239.6	9.0	2.5	1.0		
	3750	TYKW	5	S	2239.0	2239.6	2.0	4.0	1.5		
	500	HIRA	45	C	2239.0	2239.6	1.4	80.0	15.0		0
	2800	OTTA	40	F	2239.0	2243.0	6.0	3.8			
	1000	TYKW	45	C	2239.2	2241.3	2.5	84.0	6.0		
	3750	TYKW	5	S	2241.0	2243.5	4.5	5.0	2.0		
	9400	TYKW	5	S	2242.0	2243.0	2.5	5.0	2.0		
	9400	TYKW	45	C	2256.0	2257.2	25.0	18.0	5.0		
	2000	TYKW	45	C	2326.0	2328.1	4.0	7.0	2.0		
	8800	PALE	4	S/F	2327.3	2329.1	2.5	33.0			QL=6 ST=2 TYP=3
	3750	TYKW	45	C	2327.5	2327.8	4.5	11.0	3.0		
	9400	TYKW			2327.5	2327.8		28.0			
	2695	PENT	1	S	2327.5	2328.0	5.0	8.4	2.8		
	9400	TYKW	45	C	2327.5	2329.2	15.0	31.0	5.0		
	15400	PALE	47	GB	2327.5	2329.3	2.5	50.0			QL=6 ST=2 TYP=5
	1000	TYKW	45	C	2327.6	2327.7	.5	177.0	10.0		
	17000	NOBE	1	S	2328.8	2329.3	1.0	39.0			0
	2000	TYKW	29	PBI	2330.0		10.0	2.0	1.0		
	245	LEAR	8	S	2338.6	2339.1	.9	47.0			QL=6 ST=2 TYP=3
	9400	TYKW	5	S	2352.0	2352.7	6.0	4.0	1.5		
12	610	LEAR	43	NS	0154.3	0157.5	12.0	11.0			QL=6 ST=2 TYP=1
	33	UPIC	43	NS	0427.7		794.7				
	260	ONDR	44	NS	0547.0E		521.0D	108.0			
	204	IZMI	44	NS	0600.0E		360.0D	50.0			
	127	TORN	43	NS	0629.0		531.0		32.0		V1,DISTURBED
	245	SGMR	43	NS	0929.0	1213.3	866.0D	390.0			QL=6 ST=2 TYP=1
	410	SGMR	43	NS	0929.0	1740.0	866.0D	550.0			QL=6 ST=2 TYP=1
	430	KRAK	43	NS	0957.0	1114.2	183.0D	48.0	16.0		
	410	PALE	43	NS	1632.0	0355.1	744.0D	189.0			QL=6 ST=2 TYP=1
	245	PALE	43	NS	1632.0	2311.3	744.0D	390.0			QL=6 ST=2 TYP=1
	100	HIRA	44	NS	1917.0E	2213.0	825.0D	130.0	15.0		WL
	200	HIRA	44	NS	1917.0E	2248.0	825.0D	370.0	50.0		ML
	208	VORO	44	NS	2100.0E	2250.0	300.0D	115.0	35.0		
	410	LEAR	43	NS	2318.0	0439.8	611.0D	320.0			QL=6 ST=2 TYP=1
	2000	TYKW	21	GRF	0001.0	0012.0	65.0	3.0	1.0		
	2695	PENT	1	S	0001.9	0002.0	1.0	4.6			
	1000	TYKW	45	C	0003.0E	0018.2	30.0D	4.5	1.5D		
	2695	PENT	20	GRF	0005.0	0040.0	65.0	8.6	4.3		
	2695	PENT	8	S	0006.7	0007.1	.8	23.4	11.7		
	9400	TYKW	5	S	0007.0E	0010.0	13.0D	4.0	2.0D		
	3750	TYKW	21	GRF	0010.0	0040.0	60.0	6.0	2.5		
	2000	TYKW	5	S	0015.0	0015.4	1.0	1.5	.5		
	2695	PENT	1	S	0018.0	0019.0	3.0	5.6	2.7		
	9400	TYKW	21	GRF	0024.0	0040.5	75.0	10.0	4.0		
	2000	TYKW	21	GRF	0024.0	0040.5	35.0	3.0	1.0		
	3750	TYKW	5	S	0025.0	0027.4	12.0	6.0	2.0		
	2000	TYKW	5	S	0026.0	0027.0	4.0	2.0	1.0		
	1000	TYKW	5	S	0027.7	0028.1	1.0	5.0	1.5		
	9400	TYKW	5	S	0030.7	0031.0	.7	6.0	1.5		
	1000	TYKW	45	C	0032.0	0032.4	1.0	5.0	2.0		
	1000	TYKW	45	C	0034.0	0034.7	3.0	18.0	2.0		
	1000	TYKW	8	S	0038.0	0038.1	.2	8.0	2.0		
	2695	PENT	26	FAL	0040.0	0110.0	30.0	-7.0	-3.5		
	1000	TYKW	5	S	0048.0	0048.3	.6	3.0	1.0		
	1000	TYKW	5	S	0057.5	0058.0	2.5	3.5	1.0		
	1000	TYKW	45	C	0100.3	0100.5	.7	22.0	6.0		
	3750	TYKW	21	GRF	0113.0	0120.0	30.0	2.0	1.0		
	3750	TYKW	5	S	0117.0	0117.4	1.5	3.0	1.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
12	9400	TYKW	5	S	0117.0	0123.0	16.0	8.0	3.0		
	2000	TYKW	20	GRF	0117.0	0126.0	30.0	2.0	1.0		
	9400	TYKW	5	S	0146.5	0147.0	3.0	5.0	2.0		
	17000	NOBE	7	C	0146.6	0150.5	148.0	29.0			0
	17000	NOBE			0146.6	0228.7		52.0			R
	17000	NOBE			0146.6	0247.9		77.0			R
	9395	PEKG	3	S	0148.3	0150.5	9.6	77.3	11.2		
	2000	TYKW	5	S	0150.0	0150.3	3.0	6.0	2.0		
	9400	TYKW	5	S	0150.0	0150.4	6.0	82.0	16.0		
	3750	TYKW	5	S	0150.0	0150.4	7.0	64.0	15.0		
	2695	MANI	3	S	0150.5	0151.0	2.0	30.4	10.1		
	4995	MANI	3	S	0150.5	0151.0	2.5	161.5	53.8		
	8800	MANI	3	S	0150.7	0151.0	1.3	109.2	36.4		
	2000	TYKW	30	PBI	0153.0		65.0	2.0	1.0		
	9400	TYKW	30	PBI	0156.0		83.0	4.0	1.5		
	3750	TYKW	30	PBI	0157.0		105.0	7.0	3.0		
	500	HIRA	45	C	0157.0	0158.3	2.0	70.0	15.0		0
	1000	TYKW	45	C	0158.5	0158.8	1.5	15.0	3.0		
	2840	PEKG	20	GRF	0200.0	0208.0	15.0	9.9	3.4		
	9395	PEKG	45	C	0201.0	0203.2	8.0	29.0	9.9		
	9400	TYKW	5	S	0202.5	0203.0	1.5	22.0	9.0		
	9400	TYKW	29	PBI	0204.0		7.0	4.0	2.0		
	2000	TYKW	5	S	0204.0	0208.2	8.0	8.0	3.0		
	3750	TYKW	5	S	0205.0	0208.0	6.0	7.0	3.0		
	1415	MANI	3	S	0206.0	0209.0	5.5	5.6	1.9		
	2695	MANI	3	S	0207.5	0209.0	3.0	12.2	4.1		
	4995	MANI	3	S	0208.0	0209.0	2.2	23.9	8.0		
	9395	PEKG	45	C	0210.0	0217.8	14.0	37.0	12.8		
	3750	TYKW	30	PBI	0211.0		13.0	2.0	1.0		
	2000	TYKW	30	PBI	0212.0		44.0	3.0	1.5		
	9400	TYKW	45	C	0212.5	0217.6	11.0	27.0	6.0		
	2840	PEKG	3	S	0215.0	0217.8	14.0	31.6	3.8		
	3750	TYKW	45	C	0217.0	0217.6	5.0	26.0	4.0		
	2000	TYKW	5	S	0217.0	0217.6	7.0	29.0	3.5		
	500	HIRA	8	S	0217.4	0217.4	.4	200.0			0
	1000	TYKW	5	S	0217.5	0217.6	6.0	7.0	1.5		
	1415	MANI	3	S	0218.0	0218.2	3.0	13.6	4.5		
	606	MANI	4	S/F	0218.0	0220.1	2.3	84.9	28.3		
	8800	MANI	3	S	0218.1	0218.2	1.0	26.0	8.7		
	4995	MANI	3	S	0218.1	0218.2	1.2	38.9	13.0		
	2695	MANI	3	S	0218.1	0218.2	2.9	28.9	9.6		
	9400	TYKW	45	C	0225.0	0228.7	8.0	57.0	16.0		
	9395	PEKG	45	C	0226.0	0228.8	11.0	50.5	12.9		
	15400	LEAR	47	GB	0228.3	0228.6	1.0	60.0			QL=6 ST=2 TYP=5
	8800	LEAR	8	S	0228.3	0228.6	1.3	50.0			QL=6 ST=2 TYP=3
	8800	PALE	8	S	0228.3	0228.8	.7	47.0			QL=3 ST=2 TYP=3
	15400	PALE	8	S	0228.6	0228.6	.2	28.0			QL=3 ST=2 TYP=3
	3750	TYKW	45	C	0232.0	0239.3	13.0	7.0	2.0		
	9400	TYKW	30	PBI	0233.0		45.0	10.0	6.0		
	9400	TYKW	5	S	0235.0	0237.5	8.0	5.0	3.0		
	9395	PEKG	45	C	0242.0	0248.0	8.0	206.0	30.0		
	2840	PEKG	3	S	0244.0	0248.0	12.0	153.0	15.2		
	100	HIRA	42	SER	0244.9	0247.2	4.0	1300.0			WL
	2000	TYKW	45	C	0245.0	0247.9	8.0	100.0	16.0		
	9400	TYKW	45	C	0245.0	0247.9	6.0	270.0	37.0		
	2930	VORO	3	S	0245.0	0247.0	5.0	204.0			
	8800	MANI	4	S/F	0245.0	0247.7	5.5	239.2	79.7		
	1000	TYKW	8	S	0245.5	0245.6	.3	7.0	2.0		
	2695	LEAR	47	GB	0245.5	0247.8	4.1	160.0			QL=6 ST=2 TYP=5
	3750	TYKW	45	C	0245.5	0247.9	6.5	203.0	32.0		
	4995	MANI	4	S/F	0245.7	0247.7	4.8	364.8	121.6		
	1000	TYKW	45	C	0245.8	0246.1	.9	68.0	8.0		
	1415	PALE	47	GB	0245.8	0247.5	3.7	270.0			QL=3 ST=2 TYP=5
	1415	LEAR	47	GB	0245.8	0247.6	3.8	219.0			QL=6 ST=2 TYP=5
	8800	PALE	47	GB	0245.8	0247.8	3.3	300.0			QL=3 ST=2 TYP=5
	8800	LEAR	47	GB	0245.8	0247.8	3.5	300.0			QL=6 ST=2 TYP=5
	15400	LEAR	47	GB	0246.0	0247.8	2.3	100.0			QL=6 ST=2 TYP=5
	4995	LEAR	47	GB	0246.0	0247.8	3.5	239.0			QL=6 ST=2 TYP=5
	606	MANI	4	S/F	0246.0	0249.7	4.4	100.4	33.4		
	15400	PALE	47	GB	0246.1	0247.8	2.4	100.0			QL=3 ST=2 TYP=5

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
12	1000	TYKW	45	C	0246.7	0247.6	5.0	222.0	45.0		
	950	GORK	4	S/F	0246.8	0248.3	46.0	200.0			
	208	VORO	4	S/F	0247.0	0247.0	2.0	200.0D			
	950	GORK	46	C	0247.2	0248.2	2.6	21.5			
	650	GORK			0247.2	0249.4		42.0			
	200	HIRA	46	C	0247.3	0247.5	1.0	500.0	240.0		0
	4995	PALE	47	GB	0247.3	0247.8	1.8	230.0			QL=3 ST=2 TYP=5
	2695	PALE	47	GB	0247.3	0247.8	2.0	139.0			QL=3 ST=2 TYP=5
	500	HIRA	46	C	0247.3	0248.2	4.0	10.0	6.0		WL
	245	PALE	49	GB	0247.5	0247.6	.8	1399.0			QL=3 ST=2 TYP=6
	245	LEAR	49	GB	0247.6	0247.8	.5	1699.0			QL=6 ST=2 TYP=6
	410	LEAR	4	S/F	0247.6	0248.3	3.5	6.0			QL=6 ST=2 TYP=3
	610	PALE	47	GB	0247.6	0249.5	2.2	50.0			QL=3 ST=2 TYP=5
	610	LEAR	47	GB	0247.6	0249.6	2.2	80.0			QL=6 ST=2 TYP=5
	3750	TYKW	30	PBI	0252.0		20.0				
	2950	GORK	20	GRF	0257.2E	0318.0	81.0D	8.5			
	1000	TYKW	8	S	0257.9	0258.0	.2	22.0	5.0		
	2000	TYKW	5	S	0258.5	0259.0	2.5	2.0	.7		
	3750	TYKW	5	S	0258.5	0259.0	1.5	3.0	1.0		
	9100	GORK	22	GRF	0300.0E		106.0D				
	500	HIRA	46	C	0300.0	0301.9	2.3	48.0	6.0		WL
	610	LEAR	8	S	0301.1	0301.3	1.4	20.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0301.3	0301.5	.3	16.0			QL=6 ST=2 TYP=3
	2000	TYKW	5	S	0302.0	0302.3	2.0	1.5	.5		
	410	LEAR	47	GB	0302.0	0302.1	.3	370.0			QL=6 ST=2 TYP=5
	650	GORK	4	S/F	0331.4	0332.4	1.3	74.0			
	9400	TYKW	45	C	0332.0	0351.0	38.0	15.0	8.0		
	950	GORK	4	S/F	0332.0	0332.4	.7	77.0			
	410	LEAR	8	S	0332.8	0333.3	.8	13.0			QL=6 ST=2 TYP=3
	100	HIRA	8	S	0333.0	0333.2	.5	1500.0			WL
	200	HIRA	8	S	0333.0	0333.2	.3	530.0			WL
	245	LEAR	49	GB	0333.1	0333.3	.4	770.0			QL=6 ST=2 TYP=6
	245	PALE	49	GB	0333.1	0333.3	.4	860.0			QL=6 ST=2 TYP=6
	410	LEAR	8	S	0336.1	0336.3	.7	28.0			QL=6 ST=3 TYP=3
	610	LEAR	8	S	0336.1	0336.3	.7	28.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0336.6	0336.6	.2	17.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0336.6	0336.6	.2	17.0			QL=6 ST=3 TYP=3
	1000	TYKW	8	S	0345.7	0345.8	.3	11.0	3.0		
	3750	TYKW	20	GRF	0349.0	0352.0	30.0	3.0	1.0		
	610	LEAR	8	S	0359.5	0359.6	.1	5.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0359.6	0359.6	.2	37.0			QL=6 ST=2 TYP=3
	9400	TYKW	30	PBI	0410.0		12.0	4.0	2.0		
	9400	TYKW	5	S	0412.9	0413.1	1.0	4.0	1.5		
	9400	TYKW	5	S	0427.0	0428.0	5.0	4.0	1.5		
	500	HIRA	6	S	0433.2	0433.3	.5	45.0	20.0		0
	410	LEAR	8	S	0433.3	0433.5	1.5	18.0			QL=6 ST=2 TYP=3
	610	LEAR	4	S/F	0433.3	0433.6	2.5	21.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0433.3	0433.8	1.5	44.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	0435.0	0436.9	4.0	16.0	5.0		
	2000	TYKW	28	PRE	0435.0	0440.0	37.0	3.0	2.0		
	4995	LEAR	4	S/F	0435.0	0436.8	8.0	30.0			QL=6 ST=2 TYP=3
	6100	KISV	1	S	0435.8	0437.2	3.0	16.0			
	2950	GORK	21	GRF	0435.8	0536.0	315.0D	19.6			
	9400	TYKW	5	S	0436.0	0436.7	2.0	6.0	2.0		
	2950	GORK	1	S	0436.0	0437.0	2.1	4.9			
	8800	LEAR	8	S	0436.1	0436.8	1.9	15.0			QL=6 ST=2 TYP=3
	650	GORK	1	S	0436.8	0437.6	1.4	2.0			
	3750	TYKW	30	PBI	0439.0		32.0	5.0	2.0		
	500	HIRA	45	C	0439.5	0439.7	1.0	45.0	15.0		0
	950	GORK	1	S	0439.7	0440.6	2.4	2.0			
	1000	TYKW	42	SER	0440.0	0440.4	6.0	2.0	.5		
	9400	TYKW	45	C	0454.0	0524.3	136.0	268.0	97.0		
	17000	NOBE	21	GRF	0454.2	0542.8	133.0	162.0			0
	3750	TYKW	5	S	0500.0	0500.6	4.0	2.0	1.0		
	8800	LEAR	47	GB	0501.0	0524.1	106.3	270.0			QL=6 ST=2 TYP=5
	9100	GORK	46	C	0501.1	0516.1	49.0	180.0			
	9100	GORK			0501.1	0524.4		200.0			
	650	GORK	21	GRF	0501.5	0503.6	2.1U	2.0			
	650	GORK	1	S	0501.8	0502.0	.7	1.7			
	6100	KISV	28	PRE	0502.0	0511.0	9.0	8.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
12	650	GORK	1	S	0502.8	0503.1	.6	4.5			
	4995	LEAR	47	GB	0505.8	0516.0	110.2	90.0			QL=6 ST=2 TYP=5
	15400	LEAR	47	GB	0505.8	0524.3	114.2	239.0			QL=6 ST=2 TYP=5
	9395	PEKG	45	C	0510.0E	0524.5	18.0D	239.0	142.0		
	8800	ATHN	47	GB	0510.0	0515.3	35.1	180.0			QL=2 ST=2 TYP=5
	8400	BERN	22	GRF	0510.0	0524.4	60.0	226.0			
	8800	MANI	22	GRF	0510.5	0524.8	19.5	270.4	90.1		
	4995	ATHN	47	GB	0510.6	0516.3	30.9	92.0			QL=6 ST=2 TYP=5
	3750	TYKW	45	C	0511.0	0516.1	45.0	56.0	32.0		
	6100	KISV	46	C	0511.0	0515.2	33.0	93.0			
	4995	MANI	22	GRF	0511.0	0516.1	17.0	176.4	58.8		
	6100	KISV			0511.0	0519.4		74.0			
	6100	KISV			0511.0	0521.7		69.0			
	6100	KISV			0511.0	0524.5		90.0			
	6100	KISV			0511.0	0525.5		81.0			
	17000	NOBE	7	C	0511.4	0519.2	15.5	105.0			R
	2000	TYKW	45	C	0512.0	0516.1	18.0	17.0	9.0		
	2695	ATHN	4	S/F	0512.0	0516.1	29.0	31.0			QL=6 ST=2 TYP=3
	2950	GORK	4	S/F	0512.8	0516.0	6.8	26.0			
	1000	TYKW	5	S	0513.0	0513.4	1.0	7.0	2.0		
	1415	ATHN	4	S/F	0513.3	0516.6	25.7	5.0			QL=6 ST=2 TYP=3
	35000	NAGO	20	GRF	0515.0	0544.0	73.0	120.0			
	9395	PEKG	29	PBI	0517.0	0540.6	84.0	152.0			
	2950	GORK	1	S	0520.5	0521.0	1.5	3.7			
	2950	GORK	1	S	0525.5	0526.5	1.7	6.1			
	610	LEAR	47	GB	0525.6	0525.6	.2	70.0			QL=6 ST=2 TYP=5
	1000	TYKW	45	C	0525.7	0525.8	1.5	3.0	.7		
	1000	TYKW	45	C	0529.8	0530.4	1.5	2.0	.7		
	2000	TYKW	30	PBI	0530.0		180.0	7.0	3.5		
	6100	KISV	29	PBI	0544.0	0544.0		61.0			
	3750	TYKW	30	PBI	0556.0		140.0	27.0	13.0		
	9100	GORK	29	PBI	0556.7	0556.7	240.0D	140.0			
	1000	TYKW	5	S	0615.5	0615.9	1.0	3.0	.5		
	3750	TYKW	21	GRF	0617.0	0626.0	32.0	6.0	3.0		
	3750	TYKW	5	S	0646.8	0647.2	1.0	5.0	1.5		
	2000	TYKW	5	S	0647.0	0647.2	1.0	3.0	1.0		
	9400	TYKW	29	PBI	0710.0		120.0D	37.0	21.0D		
	430	KRAK	42	SER	0717.8	0718.8	72.0	600.0D			
	430	KRAK			0717.8	0742.2		320.0			
	610	LEAR	8	S	0718.5	0718.6	.1	40.0			QL=6 ST=2 TYP=3
	410	LEAR	49	GB	0718.5	0718.6	.1	550.0			QL=6 ST=2 TYP=6
	536	ONDR	8	S	0718.7	0718.7	.1	13.0			
	536	ONDR	8	S	0727.3	0727.3	.1	9.0			
	650	GORK	4	S/F	0734.3	0734.7	1.0	72.0			
	950	GORK	3	S	0734.6	0734.9	.7	19.0			
	536	ONDR	42	SER	0741.8	0745.6	8.7	41.0			
	536	ONDR	8	S	0820.9	0820.9	.1	17.0			
	1000	TYKW	8	S	0824.9	0825.0	.2	34.0	8.0		
	930	BORD	8	S	0825.0	0825.0	.1	56.0	2.0		
	2840	PEKG	45	C	0845.0	0851.0	9.0	13.7	3.6		
	1000	TYKW	8	S	0849.3	0849.4	.2	8.0	2.0		
	930	BORD	46	C	0850.0	0851.2	2.0	144.0	4.0		
	610	LEAR	47	GB	0850.1	0850.8	1.7	80.0			QL=6 ST=2 TYP=5
	950	GORK	2	S/F	0850.1	0851.2	2.4	23.0			
	1000	TYKW	45	C	0850.3	0851.3	2.0	11.0	3.0		
	2950	GORK	1	S	0850.4	0851.4	1.7	8.5	4.0		
	650	GORK	1	S	0851.1	0851.7	1.0	2.5			
	810	KRAK	8	S	0856.3	0856.3	.2	42.0			
	808	ONDR	8	S	1024.9	1025.0	.2	15.0			
	930	BORD	41	F	1027.3	1027.6	.4	23.0	2.0		
	808	ONDR	2	S/F	1028.0	1033.6	5.6U	82.0	59.0		
	15000	KISV	4	S/F	1032.1	1034.0	3.5	72.0			
	6100	KISV	1	S	1033.5	1034.0	2.0	4.0			
	6100	KISV	28	PRE	1108.0	1111.5	4.0	7.0			
	8400	BERN	3	S	1110.0	1112.9	25.0	254.0			
	15000	KISV	4	S/F	1110.3	1112.9	5.0	360.0			
	15000	KISV	29	PBI	1110.3	1115.5	35.0	41.0			
	4995	ATHN	47	GB	1110.5	1113.3	35.5	139.0			QL=6 ST=2 TYP=5
	8800	ATHN	47	GB	1111.0	1113.3	35.0	239.0			QL=6 ST=2 TYP=5
	8800	SGMR	47	GB	1111.8	1112.8	16.8	300.0			QL=6 ST=2 TYP=5

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
12	15400	SGMR	47	GB	1112.0	1112.6	16.6	410.0			QL=6 ST=2 TYP=5
	19600	BERN	3	S	1112.0	1112.8	16.0U	260.0			
	35000	BERN	3	S	1112.0	1112.8	2.0U	78.0			
	6100	KISV	4	S/F	1112.0	1113.0	5.5	109.0			
	2800	OTTA	3	S	1112.0	1132.0	20.0D	15.8	5.6		
	4995	SGMR	47	GB	1112.1	1113.0	16.5	160.0			QL=6 ST=2 TYP=5
	2695	ATHN	4	S/F	1112.6	1113.3	33.4	28.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	1112.8	1113.1	.3D	20.0			QL=6 ST=2 TYP=3
	410	SGMR	47	GB	1113.8	1114.1	.3	180.0			QL=6 ST=2 TYP=5
	6100	KISV	29	PBI	1117.5	1117.5	37.0	12.0			
	2800	OTTA	20	GRF	1120.0	1130.0	40.0	8.2	4.1		
	6100	KISV	20	GRF	1122.0	1124.5	15.0	6.0			
	15000	KISV	2	S/F	1122.0	1122.9	3.0	55.0			
	610	SGMR	47	GB	1124.6	1124.8	.4	130.0			QL=6 ST=2 TYP=5
	536	ONDR	8	S	1124.8	1124.9	.4	105.0			
	536	ONDR	8	S	1136.3	1136.4	.1	14.0			
	9400	HUAN	1	S	1241.7	1242.6	2.7	6.8	3.4		0
	536	ONDR	42	SER	1245.0	1245.4	18.3	15.0			
	2800	OTTA	40	F	1246.7	1247.2	1.3	4.8			
	930	BORD	42	SER	1247.0	1250.0	6.0	45.0	2.0		
	610	SGMR	8	S	1252.8	1253.5	.7D	40.0			QL=6 ST=2 TYP=3
	410	SGMR	47	GB	1253.3	1253.5	.5	340.0			QL=6 ST=2 TYP=5
	8800	ATHN	4	S/F	1258.8	1301.3	10.3	28.0			QL=6 ST=2 TYP=3
	19600	BERN	3	S	1259.0	1300.0	4.0	14.0			
	8400	BERN	3	S	1259.0	1300.0	9.0	20.0			
	15000	KISV	27	RF	1259.3	1300.5	6.0	34.0			
	9400	HUAN	4	S/F	1259.5	1300.0	4.1	33.8	21.2		R
	6100	KISV	27	RF	1259.5	1300.5	6.0	10.0			
	9400	HUAN			1259.5	1300.6		33.4			
	410	SGMR	47	GB	1259.6	1259.8	.5	83.0			QL=6 ST=2 TYP=5
	15400	SGMR	47	GB	1259.6	1259.8	3.4	51.0			QL=6 ST=2 TYP=5
	8800	SGMR	4	S/F	1259.6	1300.3	3.2	37.0			QL=6 ST=2 TYP=3
	4995	ATHN	4	S/F	1259.8	1301.5	9.7	17.0			QL=6 ST=2 TYP=3
	9400	HUAN	29	PBI	1303.6	1303.6	16.2	13.5	4.3		R
	9400	HUAN	2	S/F	1328.6	1331.8	7.0	14.4	4.8		R
	536	ONDR	40	F	1328.9	1332.8	6.4	150.0	77.0		
	2800	OTTA	46F	C	1329.0	1332.0	6.5	17.4	7.4		
	2650	DWIN	2	S/F	1329.0	1332.0	7.0	20.0	10.0		
	8800	ATHN	4	S/F	1329.0	1332.6	7.0	16.0			QL=6 ST=2 TYP=3
	2695	ATHN	4	S/F	1329.0	1334.0	6.1	19.0			QL=6 ST=2 TYP=3
	930	BORD	46	C	1329.0	1334.7	9.0	108.0	6.0		
	410	SGMR	49	GB	1329.1	1329.3	4.0	260.0			QL=6 ST=2 TYP=6
	6100	KISV			1329.1	1329.5		7.0			
	6100	KISV			1329.1	1330.0		8.0			
	1415	SGMR	4	S/F	1329.1	1330.1	6.7	26.0			QL=6 ST=2 TYP=3
	6100	KISV	41	F	1329.1	1331.8	6.0	10.0			
	4995	ATHN	4	S/F	1329.1	1332.6	6.0	17.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	1329.3	1329.3	.2	20.0			QL=6 ST=2 TYP=3
	610	SGMR	47	GB	1329.3	1330.1	5.5	189.0			QL=6 ST=2 TYP=5
	1415	ATHN	4	S/F	1329.6	1334.0	7.7	17.0			QL=6 ST=2 TYP=3
	8800	SGMR	8	S	1331.6	1332.0	.5	22.0			QL=6 ST=2 TYP=3
	4995	SGMR	8	S	1331.6	1332.1	2.0	20.0			QL=6 ST=2 TYP=3
	9400	HUAN	3	S	1431.9	1433.2	3.8	25.4	11.1		R
	2800	OTTA	1	S	1432.0	1434.0	4.0	9.6	4.8		
	8800	SGMR	4	S/F	1432.1	1432.8	2.5	32.0			QL=6 ST=2 TYP=3
	410	SGMR	8	S	1432.1	1433.6	1.5D	23.0			QL=6 ST=2 TYP=3
	4995	SGMR	4	S/F	1432.3	1433.0	2.5	37.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	1432.6	1433.3	1.2	21.0			QL=6 ST=2 TYP=3
	8400	BERN	46	C	1450.0	1626.4	120.0D	178.0			
	8800	ATHN	47	GB	1453.6	1454.6	12.7	50.0			QL=2 ST=2 TYP=5
	9400	HUAN	3	S	1453.7	1454.5	2.4	50.7	25.1		R
	8800	SGMR	47	GB	1453.8	1454.3	1.2	52.0			QL=6 ST=2 TYP=5
	15400	SGMR	47	GB	1454.0	1454.3	1.1	88.0			QL=6 ST=2 TYP=5
	4995	ATHN	4	S/F	1454.0	1454.6	3.6	10.0			QL=2 ST=2 TYP=3
	2695	SGMR	8	S	1454.3	1456.3	2.0	20.0			QL=6 ST=2 TYP=3
	9400	HUAN	29	PBI	1456.1	1456.1	6.5	8.4	6.3		R
	2800	OTTA	3	S	1508.0	1512.8	10.0	135.0	42.4		
	4995	SGMR	47	GB	1508.3	1512.8	21.0	300.0			QL=6 ST=2 TYP=5
	2650	DWIN	4	S/F	1510.0	1517.0	15.0	105.0	50.0		
	9400	HUAN	4	S/F	1510.1	1512.9	5.7	69.3	35.4		R

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
12	2695	SGMR	47	GB	1510.3	1512.8	7.5	130.0			QL=6 ST=2 TYP=5
	1415	SGMR	47	GB	1510.6	1512.8	5.2	52.0			QL=6 ST=2 TYP=5
	2695	ATHN	47	GB	1510.6	1513.3	21.0	110.0			QL=6 ST=2 TYP=5
	4995	ATHN	47	GB	1510.6	1513.3	19.7	210.0			QL=6 ST=2 TYP=5
	8800	ATHN	47	GB	1510.6	1513.3	13.7	66.0			QL=6 ST=2 TYP=5
	1415	ATHN	4	S/F	1510.6	1513.5	8.0	27.0			QL=6 ST=2 TYP=3
	930	BORD	45	C	1511.0	1513.1	3.0	75.0	10.0		
	8800	SGMR	47	GB	1511.3	1512.8	4.5	90.0			QL=6 ST=2 TYP=5
	610	SGMR	8	S	1512.0	1512.8	1.6	46.0			QL=6 ST=2 TYP=3
	9400	HUAN	29	PBI	1515.8	1515.8	10.6	16.9	8.4		R
	2800	OTTA	30	PBI	1518.0	1518.0	30.0	19.2	9.2		
	1415	ATHN	49	GB	1533.3	1538.6	10.0	680.0			QL=2 ST=2 TYP=6
	2650	DWIN	4	S/F	1535.0	1541.0	10.0	105.0	50.0		
	8800	ATHN	47	GB	1535.3	1538.1	11.8	78.0			QL=6 ST=2 TYP=5
	9400	HUAN	45	C	1535.5	1537.6	7.0	64.2	25.7		R
	2800	OTTA	46F	C	1535.5	1537.7	9.0	77.0	24.0		
	1415	SGMR	49	GB	1535.8	1538.1	6.3	1000.0			QL=6 ST=2 TYP=6
	930	BORD	45	C	1536.0	1537.4	8.0	351.0	25.0		
	2695	ATHN	47	GB	1536.3	1538.1	7.5	79.0			QL=6 ST=2 TYP=5
	4995	ATHN	47	GB	1536.3	1538.1	10.8	64.0			QL=6 ST=2 TYP=5
	610	SGMR	47	GB	1536.6	1537.6	3.0	100.0			QL=6 ST=2 TYP=5
	9400	HUAN	29	PBI	1542.5	1542.5	14.1	10.1	4.4		R
	2800	OTTA	21	GRF	1605.0	1705.0	130.0	28.0	14.6		
	9400	HUAN	23	GRF	1610.4	1702.2	117.7	30.4	22.9		R
	9400	HUAN	3	S	1611.5	1612.2	2.1	25.4	18.6		R
	8800	ATHN	47	GB	1612.1	1626.8	23.2	100.0			QL=6 ST=2 TYP=5
	4995	ATHN	47	GB	1612.3	1626.8	37.7	139.0			QL=6 ST=2 TYP=5
	2695	ATHN	4	S/F	1612.6	1626.8	22.2	13.0			QL=6 ST=2 TYP=3
	9400	HUAN	3	S	1617.0	1618.2	2.9	28.7	15.9		R
	9400	HUAN	4	S/F	1622.6	1626.3	5.9	93.0	43.5		R
	930	BORD	41	F	1623.0	1623.3	1.0	36.0	2.0		
	2800	OTTA	3A	S	1623.0	1629.0	10.0	12.0	6.6		
	2800	OTTA	4	S/F	1625.5	1626.4	1.8	14.4	7.2		
	1415	ATHN	4	S/F	1625.5	1632.3	9.3	13.0			QL=6 ST=2 TYP=3
	4995	SGMR	47	GB	1627.8E	1628.0	4.5D	66.0			QL=6 ST=2 TYP=5
	8800	SGMR	8	S	1627.8E	1628.8	1.0D	20.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	1628.0E	1629.5	1.5D	19.0			QL=6 ST=2 TYP=3
	2650	DWIN	2	S/F	1628.0	1632.0	7.0	25.0	10.0		
	2650	DWIN		PBI	1633.0						
	4995	SGMR	20	GRF	1641.0	1643.6	4.6	31.0			QL=6 ST=2 TYP=2
	9400	HUAN	2	S/F	1641.2	1643.3	4.1	11.8	4.5		0
	8800	SGMR	8	S	1642.6	1643.3	.7D	19.0			QL=6 ST=2 TYP=3
	930	BORD	45	C	1736.0	1741.9	19.0	135.0	15.0		
	9400	HUAN	4	S/F	1736.0	1736.9	2.5	25.4	16.5		R
	9400	HUAN			1736.0	1737.8		37.2			
	2800	OTTA	45	C	1736.0	1741.6	10.0	69.0	18.2		
	2650	DWIN	2	S/F	1737.0	1741.0	10.0	60.0	30.0		
	9400	HUAN	4	S/F	1741.3	1741.7	3.3	49.0	10.1		R
	2800	OTTA	29	PBI	1746.0	1746.0	20.0	8.6	4.3		
	9400	HUAN	23	GRF	1812.2	1900.8	112.8	33.8	14.8		R
	9400	HUAN	3	S	1818.3	1819.6	4.0	42.2	22.8		R
	2800	OTTA	21	GRF	1820.0	1900.0	95.0	13.6	6.8		
	9400	HUAN	1	S	1829.3	1830.6	3.2	8.4	5.7		0
	9400	HUAN	4	S/F	1851.0	1855.5	57.5	82.8	38.2		R
	2800	OTTA	3A	S	1852.0	1854.0	12.0	16.8	8.4		
	2800	OTTA	3	S	1854.5	1855.7	2.0	12.0	5.6		
	9400	HUAN	1	S	2029.4	2030.2	1.8	11.8	8.1		R
	500	HIRA	22	GRF	2051.0	2244.6	240.0	15.0	4.0		SL
	208	VORO			2123.0	2124.5		200.0D			
	9400	TYKW	5	S	2252.5	2252.7	1.0U	15.0	5.0U		
	2000	TYKW	21	GRF	2255.0	2344.0	335.0	7.0	3.0		
	1000	TYKW	21	GRF	2255.0	2350.0	330.0	2.0	1.0		
	3750	TYKW	21	GRF	2255.0	2350.0	350.0	20.0	10.0		
	9400	TYKW	21	GRF	2255.0	2352.6	340.0	30.0	13.0		
	2695	PENT	240	R	2300.0	2315.0	15.0	4.6	2.3		
	9400	TYKW	5	S	2318.5	2319.3	3.5	47.0	12.0		
	17000	NOBE	1	S	2318.5	2319.3	2.0	29.0			R
	3750	TYKW	5	S	2318.7	2319.2	1.5	8.0	3.0		
	1000	TYKW	5	S	2319.0	2319.2	1.0	7.0	2.5		
	2000	TYKW	5	S	2319.0	2319.2	1.0	14.0	4.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
12	8800	PALE	47	GB	2319.0	2319.3	.6	58.0			QL=6 ST=2 TYP=5
	2695	PENT	1	S	2319.0	2319.3	1.0	4.6	2.3		
	2695	PENT	27	RF	2335.0		95.0	7.0	5.5		
	2695	PENT	24	R	2335.0	2345.0	10.0	7.0	3.5		
	9400	TYKW	5	S	2338.0	2338.4	2.0	5.0	2.0		
	1000	TYKW	45	C	2338.0	2344.4	9.0	12.0	2.0		
	2695	PENT	24	R	2345.0		55.0	7.0			
	3750	TYKW	5	S	2351.0	2352.7	8.0	5.0	1.5		
	9400	TYKW	5	S	2357.0	2357.7	4.0	4.0	1.5		
	610	LEAR	47	GB	2357.1	2357.6	.7	200.0			QL=6 ST=2 TYP=5
	610	PALE	47	GB	2357.6	2357.6	.2	139.0			QL=6 ST=2 TYP=5
	15400	PALE	8	S	2357.6	2358.6	1.0D	30.0			QL=6 ST=2 TYP=3
13	100	GORK	44	NS	0253.0E		367.0D		5.0		
	200	GORK	44	NS	0254.0E		487.0D		20.0		
	33	UPIC	43	NS	0517.3		578.2				
	260	ONDR	44	NS	0556.0E	0634.0U	507.0D	152.0			
	204	IZMI	44	NS	0600.0E		360.0D	22.0			
	127	TORN	43	NS	0630.0		360.0U		2.0		V1,DISTURBED
	245	SGMR	43	NS	0929.0	1131.1	869.0D	690.0			QL=6 ST=2 TYP=1
	410	SGMR	43	NS	0929.0	1238.8	869.0D	239.0			QL=6 ST=2 TYP=1
	200	HIRA	44	NS	1918.0E	0200.0	825.0D	20.0	10.0		0
	208	VORO	44	NS	2100.0E		360.0D		10.0		
	245	LEAR	43	NS	2322.0	0002.3	607.0D	20.0			QL=6 ST=2 TYP=1
	2000	TYKW	5	S	0001.0	0002.0	12.0	3.0	.7D		
	610	LEAR	8	S	0001.8	0002.0	.3	30.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	0004.0	0006.9	10.0	8.0	2.5		
	2840	PEKG	45	C	0005.0	0007.4	6.0	29.4	3.6		
	245	LEAR	47	GB	0005.6	0006.8	1.4	300.0			QL=6 ST=2 TYP=5
	1000	TYKW	45	C	0006.6	0006.8	1.0	6.0	1.5		
	2695	LEAR	8	S	0006.6	0007.1	1.0	30.0			QL=6 ST=2 TYP=3
	410	LEAR	47	GB	0006.8	0006.8	.2	300.0			QL=6 ST=2 TYP=5
	1415	LEAR	8	S	0006.8	0007.1	1.5	15.0			QL=6 ST=2 TYP=3
	410	LEAR	4	S/F	0011.1	0013.1	4.5	40.0			QL=6 ST=2 TYP=3
	2000	TYKW	21	GRF	0016.0	0019.0	50.0	2.0	1.0		
	3750	TYKW	21	GRF	0017.0	0034.0	45.0	9.0	4.0		
	3750	TYKW	5	S	0017.5	0019.0	7.0	9.0	3.0		
	9400	TYKW	21	GRF	0030.0	0038.0	33.0	8.0	3.5		
	3750	TYKW	5	S	0036.0	0037.4	5.0	2.0	1.0		
	9400	TYKW	5	S	0045.0	0045.4	1.0	5.0	1.5		
	2000	TYKW	5	S	0045.0	0048.0	15.0	2.0	.1		
	410	LEAR	8	S	0047.1	0047.3	1.7	25.0			QL=6 ST=2 TYP=3
	9400	TYKW	5	S	0050.0	0051.6	5.0	9.0	3.0		
	410	LEAR	47	GB	0112.6	0113.3	1.7	390.0			QL=6 ST=2 TYP=5
	500	HIRA	45	C	0112.7	0112.9	2.0	68.0	8.0		0
	610	LEAR	8	S	0112.8	0113.1	1.0	13.0			QL=6 ST=2 TYP=3
	1000	TYKW	45	C	0117.0	0123.7	10.0	8.0	1.5		
	2840	PEKG	20	GRF	0129.0	0202.3	72.0	41.9	16.0		
	3750	TYKW	45	C	0135.0	0202.6	50.0	30.0	17.0		
	9400	TYKW	28	PRE	0138.0	0139.6	9.0	12.0	6.0		
	9395	PEKG	21	GRF	0139.0	0209.7	68.0	22.8	16.6		
	9395	PEKG	45	C	0141.8	0150.9	12.2	38.4	7.7		
	2000	TYKW	5	S	0145.0	0202.5	50.0	15.0	10.0		
	4995	LEAR	4	S/F	0145.1	0150.6	11.9	27.0			QL=6 ST=2 TYP=3
	2695	LEAR	20	GRF	0145.1	0151.1	11.9	28.0			QL=6 ST=2 TYP=2
	9400	TYKW	5	S	0147.0	0150.7	8.0	45.0	20.0		
	8800	LEAR	4	S/F	0148.6	0150.6	7.7	40.0			QL=6 ST=2 TYP=3
	2695	PALE	8	S	0149.1	0150.6	1.5D	20.0			QL=6 ST=2 TYP=3
	17000	NOBE	1	S	0149.7	0150.7	2.5	20.0			R
	15400	LEAR	4	S/F	0149.8	0150.6	6.5	29.0			QL=6 ST=2 TYP=3
	4995	PALE	8	S	0150.5	0151.1	.6D	16.0			QL=6 ST=2 TYP=3
	9400	TYKW	30	PBI	0155.0		155.0	15.0	8.0		
	9400	TYKW	45	C	0157.0	0210.0	28.0	15.0	5.0		
	9400	TYKW			0157.0	0220.0		15.0			
	17000	NOBE	1	S	0209.3	0210.2	5.0	20.0			R
	15400	LEAR	8	S	0209.6	0210.1	1.0	23.0			QL=6 ST=3 TYP=3
	3750	TYKW	30	PBI	0225.0		135.0	16.0	8.0		
	2000	TYKW	30	PBI	0235.0		110.0	8.0	4.0		
	500	HIRA	41	F	0237.6	0240.2	6.3	50.0			WR
	4995	LEAR	4	S/F	0237.8	0243.1	8.2	25.0			QL=6 ST=2 TYP=3

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
13	3750	TYKW			0238.0	0242.9		15.0			
	3750	TYKW	45	C	0238.0	0259.7	37.0	18.0	9.0		
	9400	TYKW	5	S	0240.0	0243.3	9.0	6.0	2.5		
	2000	TYKW	21	GRF	0240.0	0249.0	100.0	6.0	3.0		
	1000	TYKW	21	GRF	0240.0	0310.0	90.0	3.0	1.5		
	410	LEAR	8	S	0240.0	0240.8	1.8	46.0			QL=6 ST=2 TYP=3
	1000	TYKW	45	C	0252.0	0252.3	.5	4.0	1.0		
	500	HIRA	8	S	0254.0	0254.0	.4	2000.0			WR
	245	LEAR	49	GB	0254.1	0254.3	.2	500.0			QL=6 ST=2 TYP=6
	410	LEAR	49	GB	0254.1	0254.3	.2	3399.0			QL=6 ST=2 TYP=6
	610	LEAR	8	S	0254.1	0254.3	.2	42.0			QL=6 ST=2 TYP=3
	1415	LEAR	8	S	0254.1	0254.3	.2	26.0			QL=6 ST=2 TYP=3
	1000	TYKW	5	S	0254.2	0254.3	1.0	15.0	3.0		
	2000	TYKW	5	S	0254.2	0254.3	.8	11.0	3.0		
	2950	GORK	21	GRF	0255.0E		500.0D				
	9100	GORK	23	GRF	0256.0E		439.0D				
	1000	TYKW	42	SER	0257.0E	0259.7	3.0D	26.0	2.0D		
	2840	PEKG	3	S	0259.0	0259.7	2.0	15.9	4.1		
	1415	LEAR	8	S	0259.1	0259.8	2.0	40.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0259.1	0259.8	1.2	15.0			QL=6 ST=2 TYP=3
	4995	LEAR	8	S	0259.1	0259.8	1.5	10.0			QL=6 ST=2 TYP=3
	2695	LEAR	8	S	0259.1	0259.8	1.7	18.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0259.1	0259.8	1.2	40.0			QL=6 ST=2 TYP=3
	500	HIRA	8	S	0259.4	0259.5	.4	500.0			WR
	2950	GORK	1	S	0259.5	0259.8	.7	12.0	6.0		
	1415	PALE	8	S	0259.6	0259.6	.5	48.0			QL=6 ST=2 TYP=3
	2000	TYKW	5	S	0259.8E	0259.8U	1.0D	16.0D	5.0D		
	500	HIRA	45	C	0300.6	0302.6	3.0	18.0	3.0		WR
	9400	TYKW	5	S	0302.0	0310.0	14.0	5.0	2.0D		
	2000	TYKW	42	SER	0308.0E	0309.8	2.5D	17.0	1.5D		
	1000	TYKW	45	C	0308.4	0308.8	.6	2.0	.5		
	2000	TYKW	8	S	0312.2	0312.3	.4	6.0	1.5		
	2000	TYKW	45	C	0313.0	0313.4	2.5	16.0	2.0		
	1415	LEAR	47	GB	0313.1	0314.8	2.0	50.0			QL=6 ST=2 TYP=5
	1000	TYKW	45	C	0314.0	0314.8	1.5	3.0	.7		
	100	GORK	4	S/F	0314.3	0315.3	1.0	55.0D			
	3750	TYKW	30	PBI	0315.0		65.0	4.0	2.0		
	9400	TYKW	5	S	0317.0	0318.0	3.0	3.0	1.0		
	1000	TYKW	5	S	0317.8	0318.0	1.5	1.5	.5		
	2000	TYKW	45	C	0320.0	0323.5	14.0	5.0	1.5		
	1415	LEAR	47	GB	0320.0	0320.8	2.8	80.0			QL=6 ST=2 TYP=5
	1000	TYKW	45	C	0320.4	0320.6	3.5	27.0	4.0		
	9400	TYKW	5	S	0321.0	0322.3	12.0	21.0	7.0		
	9395	PEKG	3	S	0321.0	0322.7	9.0	19.5	10.0		
	8800	LEAR	4	S/F	0321.3	0322.1	4.7	18.0			QL=6 ST=2 TYP=3
	9100	GORK	1	S	0321.4	0322.3	3.8	16.0			
	15400	LEAR	8	S	0321.8	0322.6	2.0	11.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	0322.0	0324.0	7.0	3.0	1.0		
	9400	TYKW	5	S	0339.5	0340.2	3.5	4.0	1.5		
	410	LEAR	47	GB	0340.6	0341.0	1.5	150.0			QL=6 ST=2 TYP=5
	9395	PEKG	3	S	0349.0	0350.0	2.0	14.7	4.4		
	2840	PEKG	3	S	0349.0	0350.0	4.0	11.4	2.9		
	9400	TYKW	45	C	0349.5	0350.0	22.0	18.0	4.0U		INTERFERENCE
	3750	TYKW	5	S	0349.5	0350.0	2.5	15.0	5.0		
	2000	TYKW	45	C	0349.7	0350.1	3.3	6.0	1.5		
	1415	LEAR	8	S	0349.8	0350.0	.5	4.0			QL=6 ST=2 TYP=3
	2695	LEAR	8	S	0349.8	0350.0	2.0	10.0			QL=6 ST=2 TYP=3
	2950	GORK	1	S	0349.8	0350.0	1.2	8.3	4.0		
	8800	LEAR	4	S/F	0349.8	0350.0	3.3	22.0			QL=6 ST=2 TYP=3
	4995	LEAR	8	S	0349.8	0350.0	2.0	20.0			QL=6 ST=2 TYP=3
	9100	GORK	1	S	0349.8	0350.1	1.1	13.0			
	500	HIRA	41	F	0350.6	0356.0	6.0	400.0			WR
	410	LEAR	47	GB	0350.8	0351.0	.3	65.0			QL=6 ST=2 TYP=5
	3750	TYKW	30	PBI	0352.0		25.0	2.0	1.0		
	410	LEAR	49	GB	0353.8	0356.1	3.8	1300.0			QL=6 ST=3 TYP=6
	410	PALE	49	GB	0354.5	0356.1	2.5	1800.0			QL=2 ST=3 TYP=6
	6100	KISV	26	FAL	0400.0		50.0	14.0			
	950	GORK	2	S/F	0436.0	0436.9	2.2	25.0			
	6100	KISV	40	F	0448.4	0453.0	22.0	26.0			
	6100	KISV			0448.4	0504.2		26.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
13	6100	KISV			0448.4	0506.5		19.0			
	3750	TYKW	45	C	0449.0	0504.1	49.0	35.0	10.0		
	9400	TYKW	45	C	0449.0	0506.5	21.0	46.0	15.0		
	2000	TYKW	45	C	0449.0	0510.3	31.0U	7.0	4.0		
	4995	ATHN	47	GB	0449.0	0452.5	26.0	55.0			QL=6 ST=2 TYP=5
	9395	PEKG	3	S	0449.0	0453.0	8.0	16.2	5.9		
	2840	PEKG	45	C	0449.0	0504.1	15.1U	22.7	10.9		
	8800	ATHN	4	S/F	0449.5	0452.6	25.5	11.0			QL=6 ST=2 TYP=3
	9100	GORK	1	S	0449.8	0452.8	4.3	12.0			
	4995	LEAR	20	GRF	0449.8	0453.0	7.0	60.0			QL=6 ST=2 TYP=2
	2950	GORK	1	S	0450.4	0453.2	5.3	11.9			
	8800	MANI	22	GRF	0450.5	0508.3	20.5	91.1	30.4		
	4995	MANI	22	GRF	0450.7	0453.8	20.3	65.4	21.8		
	8800	LEAR	4	S/F	0450.8	0452.8	6.0	23.0			QL=6 ST=2 TYP=3
	2695	MANI	22	GRF	0451.0	0505.3	17.0	23.8	7.9		
	1000	TYKW	21	GRF	0452.0	0501.0	120.0	2.0	1.0		
	2695	LEAR	4	S/F	0452.6	0453.0	4.2	13.0			QL=6 ST=2 TYP=3
	9395	PEKG	45	C	0457.0	0504.1	14.0	35.1	11.2		
	9395	PEKG			0457.0	0507.1		40.8			
	15000	KISV	40	F	0500.0	0504.2	10.0	27.0			
	15000	KISV			0500.0	0506.5		19.0			
	9100	GORK	46	C	0501.5	0504.1	7.3	22.0			
	9100	GORK			0501.5	0507.2		26.0			
	4995	LEAR	4	S/F	0501.8	0504.1	5.7	47.0			QL=6 ST=2 TYP=3
	8800	LEAR	4	S/F	0501.8	0504.1	7.2	37.0			QL=6 ST=2 TYP=3
	15400	LEAR	4	S/F	0501.8	0504.3	6.8	34.0			QL=6 ST=2 TYP=3
	2950	GORK	1	S	0502.3	0504.2	3.5	8.3	4.0		
	2000	TYKW	30	PBI	0510.0		170.0	4.0	2.0		
	9400	TYKW	29	PBI	0510.0		50.0	20.0	8.0		
	9395	PEKG	29	PBI	0511.0	0514.7	16.0	16.2	10.8		
	2840	PEKG	29	PBI	0513.0	0521.0	26.0	8.5	8.2		
	2000	TYKW	5	S	0529.0	0530.6	5.0	3.0	1.0		
	2950	GORK	1	S	0529.2	0530.7	3.1	4.7			
	1000	TYKW	45	C	0530.0	0534.6	9.0	2.0	1.0		
	500	HIRA	41	F	0530.3	0530.4	6.0	250.0			WR
	410	LEAR	47	GB	0530.3	0530.6	.5	320.0			QL=6 ST=2 TYP=5
	610	LEAR	47	GB	0530.3	0531.8	4.2	119.0			QL=6 ST=3 TYP=5
	2000	TYKW	5	S	0534.0	0534.6	4.0	3.0	1.0		
	3750	TYKW	30	PBI	0538.0		130.0	5.0	2.0		
	1000	TYKW	5	S	0544.1	0544.3	.5	2.0	.7		
	650	GORK	21	GRF	0545.6	0639.8	307.0D	7.8			
	410	LEAR	8	S	0603.8	0604.5	.8	48.0			QL=6 ST=2 TYP=3
	245	LEAR	49	GB	0604.3	0604.5	.3	740.0			QL=6 ST=2 TYP=6
	1000	TYKW	20	GRF	0610.0	0617.0	37.0	1.5	.7		
	3750	TYKW	20	GRF	0610.0	0626.0	40.0	3.0	1.5		
	9400	TYKW	20	GRF	0610.0	0627.0	105.0	11.0	6.0		
	500	HIRA	22	GRF	0613.6	0645.3	74.0	10.0	4.0		SL
	9395	PEKG	3	S	0656.4	0657.7	3.6	13.0	3.7		
	9100	GORK	1	S	0656.7	0657.6	1.2	8.0	4.0		
	3750	TYKW	21	GRF	0700.0	0718.0	50.0	6.0	2.0		
	430	KRAK	42	SER	0705.0E	0715.7	22.0D	120.0			
	1000	TYKW	45	C	0710.0	0715.2	15.0	11.0	3.0		
	2000	TYKW	20	GRF	0710.0	0718.0	35.0	6.0	2.0		
	808	ONDR	40	F	0710.4	0716.7	27.0	16.0	13.0		
	950	GORK	4	S/F	0712.0	0715.9	18.2	9.6			
	650	GORK	40	F	0713.1	0715.8	6.7	14.0			
	536	ONDR	23	GRF	0715.0	0716.8	9.4	8.0	4.0		
	3750	TYKW	45	C	0734.0	0736.1	9.0	6.0	1.5		
	3750	TYKW	45	C	0801.0	0801.6	3.0	6.0	1.5		
	3750	TYKW	5	S	0811.0	0820.0	18.0	15.0	6.0		
	9100	GORK	1	S	0815.0	0815.6	1.7	8.0	4.0		
	3750	TYKW	29	PBI	0829.0		25.0	2.0	1.0		
	430	KRAK	42	SER	0833.2	0834.2	22.0	170.0			
	536	ONDR	8	S	0834.8	0834.8	.3	8.0			
	650	GORK	2	S/F	0840.5	0841.0	1.4	19.0			
	950	GORK	2	S/F	0841.0	0841.4	1.0	11.0			
	100	GORK	41	F	0843.3	0843.7	7.3	90.0D			
	100	GORK			0843.3	0845.2		90.0D			
	100	GORK			0843.3	0847.5		90.0D			
	100	GORK			0843.3	0849.7		90.0D			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
13	204	IZMI	41	F	0847.2	0847.4	2.5	150.0			
	950	GORK	4	S/F	0905.5	0906.6	3.7	45.0			
	650	GORK	4	S/F	0905.6	0906.5	1.4	60.0			
	808	ONDR	8	S	0913.4	0913.4	.2	156.0			
	2840	PEKG	45	C	0922.0	0930.0	8.0U	53.8	16.8		
	536	ONDR	42	SER	0923.0	0943.7	27.8	17.0			
	9395	PEKG	45	C	0924.0	0929.4	19.0	47.0	14.0		
	2650	DWIN	1	S	0925.0	0930.0	10.0	35.0	15.0		
	4995	ATHN	4	S/F	0925.5	0929.8	12.5	58.0			QL=6 ST=2 TYP=3
	2695	ATHN	4	S/F	0925.6	0930.0	11.4	36.0			QL=6 ST=2 TYP=3
	6100	KISV	28	PRE	0926.0	0929.9	95.0	25.0			
	3000	IZMI	5	S	0926.0	0930.0	8.0	71.0	43.0		
	8800	ATHN	4	S/F	0927.0E	0929.0	13.0D	39.0			QL=6 ST=2 TYP=3
	2950	GORK	3	S	0927.0	0929.9	5.6	40.0	20.0		
	9100	GORK	4	S/F	0927.2	0929.4	6.3	40.0			
	810	KRAK	40	F	0928.0	0929.6	3.0	66.0			
	650	GORK	40	F	0928.7	0929.2	1.7	5.5			
	930	BORD	41	F	0929.0	0930.6	2.2	24.0	2.0		
	808	ONDR	40	F	0929.5	0929.9	2.0	20.0	15.0		
	6100	KISV	29	PBI	0935.5	0953.0	200.0U	91.0			
	430	KRAK	41	F	0942.7	0943.5	5.6	100.0			
	410	SGMR	49	GB	0943.0	0943.6	.8	500.0			QL=4 ST=3 TYP=6
	9395	PEKG	47	GB	0943.0	0946.2	27.0	2086.0	351.0		
	200	GORK	8	S	0943.3	0944.0	.9	560.0			
	204	IZMI	45	C	0943.5	0943.6	1.0	1250.0	450.0		
	245	SGMR	49	GB	0943.5	0943.6	.8	1600.0			QL=4 ST=3 TYP=6
	100	GORK	42	SER	0943.5	0943.8	25.0	300.0D			
	100	GORK			0943.5	0955.2		90.0			
	100	GORK			0943.5	1007.5U		90.0D			
	8800	ATHN	49	GB	0943.6	0946.0	23.4	1899.0			QL=2 ST=2 TYP=6
	9100	GORK	47	GB	0943.7	0944.8	10.2	760.0			
	9100	GORK			0943.7	0946.2		800.0			
	6100	KISV	47	GB	0943.8		9.0	560.0D			
	15000	KISV	47	GB	0944.0		8.0	1770.0D			
	4995	ATHN	49	GB	0944.0	0946.1	23.0	1300.0			QL=2 ST=2 TYP=6
	930	BORD	45	C	0944.0	0948.2	10.0	27.0	4.0		
	2650	DWIN	49	GB	0944.0	1047.0	63.3U	550.0D			
	15400	SGMR	49	GB	0944.1	0946.0	10.7	890.0			QL=4 ST=3 TYP=6
	35000	BERN	47	GB	0944.3	0944.8	6.0D	2910.0			
	2950	GORK	45	C	0944.3	0945.3	6.6				
	3000	IZMI	47	GB	0944.3	0946.0	9.0	1500.0	700.0		
	19600	BERN	47	GB	0944.3	0946.1	50.0	2227.0			
	11800	BERN	47	GB	0944.3	0946.2	50.0	2600.0U			
	1415	ATHN	47	GB	0944.3	0946.3	22.7	110.0			QL=6 ST=2 TYP=5
	2950	GORK			0944.3	0946.3		958.0			
	2695	SGMR	47	GB	0944.3	0946.3	5.5	189.0			QL=4 ST=3 TYP=5
	2695	ATHN	49	GB	0944.3	0946.5	22.7	750.0			QL=6 ST=2 TYP=6
	8400	BERN	47	GB	0944.3	0947.4U	50.0	2520.0D			
	8800	SGMR	47	GB	0944.3	0955.0	18.0	230.0			QL=4 ST=3 TYP=5
	4995	SGMR	47	GB	0944.3	0958.1	20.5	219.0			QL=4 ST=3 TYP=5
	950	GORK	46	C	0944.4	0948.2	8.1	24.0			
	950	GORK			0944.4	0949.0		25.0			
	1415	MANI	4	S/F	0944.5	0945.0	1.5	39.3	13.1		
	8800	MANI	47	GB	0944.5	0945.1	3.5	851.0	283.7		
	4995	MANI	47	GB	0944.5	0945.1	3.5	514.0	171.3		
	2695	MANI	4	S/F	0944.5	0945.4	3.5	149.8	49.9		
	808	ONDR	40	F	0945.8	0948.0	9.8	20.0	12.0		
	650	GORK	2	S/F	0948.0	0948.2	1.6	3.8			
	15000	KISV	29	PBI	0952.0	0952.0		236.0D			
	950	GORK	30	PBI	0952.5	0952.7	82.0D	8.8			
	15000	KISV	4	S/F	0954.6	0955.5	2.0	101.0D			
	9100	GORK	46	C	1008.6	1011.0	6.9	100.0			
	9100	GORK			1008.6	1014.0		200.0			
	4995	ATHN	47	GB	1009.0	1014.5	92.5	270.0			QL=6 ST=2 TYP=5
	8800	ATHN	47	GB	1009.0	1014.5	92.5	189.0			QL=6 ST=2 TYP=5
	2695	ATHN	47	GB	1009.0	1014.5	92.5	119.0			QL=6 ST=2 TYP=5
	6100	KISV			1009.1	1011.0		53.0			
	6100	KISV	45	C	1009.1	1014.1	9.0	126.0			
	15000	KISV			1009.2	1011.0		137.0			
	15000	KISV	45	C	1009.2	1014.0	7.0	190.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
13	3000	IZMI	7	C	1010.0	1014.0	10.0	120.0	30.0		
	1415	ATHN	47	GB	1011.5	1014.5	90.0	59.0			QL=6 ST=2 TYP=5
	950	GORK	4	S/F	1012.6	1013.4	3.3	159.0			
	930	BORD	41	F	1012.8	1013.4	2.2	272.0	2.0		
	2950	GORK	1	S	1013.2	1014.1	1.8	8.5	4.0		
	2800	OTTA			1050.0		150.0D	51.0			
	2650	DWIN		PBI	1050.0		100.0				
	650	GORK	40	F	1103.0	1108.9	6.6	14.3			
	950	GORK	1	S	1103.9	1104.0	.8	4.4			
	536	ONDR	8	S	1106.3	1106.8	.6	20.0			
	204	IZMI	5	S	1131.5	1131.6	1.0	700.0	400.0		
	536	ONDR	8	S	1132.3	1132.3	.2	6.0			
	430	KRAK	8	S	1207.4	1208.0	1.3	200.0			
	810	KRAK	40	F	1210.3	1210.8	1.6	84.0			
	808	ONDR	2	S/F	1210.3	1211.0	3.0	91.0	38.0		
	930	BORD	41	F	1210.4	1210.6	1.5	323.0	2.0		
	536	ONDR	8	S	1211.7	1211.8	.2	13.0			
	536	ONDR	42	SER	1239.0	1239.2	3.8	62.0			
	610	SGMR	8	S	1241.3	1241.6	.5	33.0			QL=6 ST=2 TYP=3
	430	KRAK	8	S	1241.7	1241.7	.2	280.0			
	410	SGMR	49	GB	1350.3	1350.6	.5	690.0			QL=6 ST=2 TYP=6
	610	SGMR	8	S	1350.5	1350.6	.3	32.0			QL=6 ST=2 TYP=3
	536	ONDR	42	SER	1350.7	1350.9	6.3	20.0			
	2800	OTTA	1	S	1400.0	1405.0	5.0D	2.5			
	9400	HUAN	1	S	1406.1	1406.8	1.8	8.7	3.8		0
	4995	SGMR	8	S	1406.3	1406.5	.3	20.0			QL=6 ST=2 TYP=3
	8800	SGMR	8	S	1406.3	1406.5	.3	24.0			QL=6 ST=2 TYP=3
	2695	PENT	1	S	1408.0	1410.5	4.0	3.6	1.6		
	9400	HUAN	20	GRF	1422.7	1430.0	15.3	3.5	2.7		0
	1415	ATHN	47	GB	1441.5	1445.6	6.8	440.0			QL=6 ST=2 TYP=5
	2695	ATHN	4	S/F	1441.5	1445.6	10.1	18.0			QL=6 ST=2 TYP=3
	2800	OTTA	4	S/F	1442.0	1445.5	8.0	12.2	3.0		
	930	BORD	46	C	1442.0	1445.8	7.0	357.0	6.0		
	1415	SGMR	49	GB	1442.3	1445.6	5.5	600.0			QL=6 ST=2 TYP=6
	9400	HUAN	2	S/F	1442.6	1446.2	6.9	19.1	10.4		R
	8800	ATHN	4	S/F	1443.8	1445.6	4.5	9.0			QL=6 ST=2 TYP=3
	4995	ATHN	4	S/F	1443.8	1445.6	4.5	11.0			QL=6 ST=2 TYP=3
	2650	DWIN	2	S/F	1444.0	1445.0	4.0	20.0	10.0		
	8800	SGMR	8	S	1444.1	1445.3	2.0	26.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	1445.0	1445.5	1.0	21.0			QL=6 ST=2 TYP=3
	610	SGMR	8	S	1445.1	1445.8	.7	37.0			QL=6 ST=2 TYP=3
	1415	ATHN	47	GB	1456.6	1457.8	3.4	160.0			QL=6 ST=2 TYP=5
	1415	SGMR	47	GB	1457.0	1457.6	2.0	200.0			QL=6 ST=2 TYP=5
	930	BORD	41	F	1457.0	1458.6	2.4	30.0	3.0		
	930	BORD	8	S	1508.8	1508.8	.1	20.0	1.0		
	610	SGMR	8	S	1516.3	1516.6	1.0	30.0			QL=6 ST=2 TYP=3
	9400	HUAN	22	GRF	1544.5	1624.4	60.3	13.9	5.7		0
	2800	OTTA	20	GRF	1545.0	1550.0	25.0	3.2	1.7		
	2800	OTTA	20	GRF	1615.0	1633.0	30.0	8.4	4.0		
	2800	OTTA	1	S	1650.0	1653.2	10.0	7.4	2.5		
	2800	OTTA	260	FAL	1700.0	1745.0	45.0	-5.8	-2.9		
	9400	HUAN	1	S	1700.5	1701.2	1.1	6.9	4.0		0
	4995	SGMR	8	S	1700.6	1700.8	.5	23.0			QL=6 ST=2 TYP=3
	8800	SGMR	8	S	1700.6	1700.8	2.0	18.0			QL=6 ST=2 TYP=3
	2650	DWIN	4	S/F	1815.0	1818.0	10.0	60.0	30.0		
	2800	OTTA	4	S/F	1815.0	1818.2	15.0	53.0	24.1		
	8800	SGMR	49	GB	1815.1	1817.8	19.7	540.0			QL=6 ST=2 TYP=7
	9400	HUAN	3	S	1815.2	1821.8U	11.1	126.6	66.2		R
	15400	SGMR	49	GB	1815.6	1818.0	18.5	1100.0			QL=6 ST=2 TYP=7
	4995	SGMR	49	GB	1815.6	1818.1	18.5	119.0			QL=6 ST=2 TYP=7
	15400	PALE	49	GB	1816.0	1817.5	20.8	1399.0			QL=6 ST=2 TYP=7
	8800	PALE	49	GB	1816.1	1817.5	9.5	610.0			QL=6 ST=2 TYP=7
	2695	SGMR	49	GB	1816.1	1818.1	18.0	70.0			QL=6 ST=2 TYP=7
	4995	PALE	49	GB	1816.3	1818.3	9.3	100.0			QL=6 ST=2 TYP=7
	245	PALE	49	GB	1816.6	1817.0	2.5	1699.0			QL=6 ST=2 TYP=7
	245	SGMR	49	GB	1816.6	1817.1	2.5	2000.0			QL=6 ST=2 TYP=7
	930	BORD	45	C	1816.7	1816.8	9.0	116.0	10.0		
	2695	PALE	49	GB	1816.8	1818.5	6.3	66.0			QL=6 ST=2 TYP=7
	1415	SGMR	49	GB	1817.0	1818.6	5.6	74.0			QL=6 ST=2 TYP=7
	610	SGMR	49	GB	1817.3	1818.6	7.2	59.0			QL=6 ST=2 TYP=7

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
13	1415	PALE	49 GB	1817.3	1818.6	4.2	63.0			QL=6 ST=2 TYP=7
	610	PALE	49 GB	1817.3	1818.8	7.0	53.0			QL=6 ST=2 TYP=7
	410	SGMR	49 GB	1817.8	1818.8	5.0	47.0			QL=6 ST=2 TYP=7
	410	PALE	49 GB	1818.3	1818.8	3.3	28.0			QL=6 ST=2 TYP=7
	9400	HUAN	29 PBI	1826.3	1826.3	21.1	34.7	12.9		R
	2800	OTTA	29 PBI	1830.0	1830.0	30.0	8.4	3.8		
	9400	HUAN	32 ABS	1847.4	1900.0	27.6	-8.7	-5.8		L
	2800	OTTA	20 GRF	1910.0	1920.0	25.0	3.6	1.4		
	9400	HUAN	21 GRF	1939.0	2006.3	44.0	17.3	6.9		R
	15400	PALE	8 S	1942.1	1942.5	.7	39.0			QL=6 ST=2 TYP=3
	9400	HUAN	2 S/F	1942.2	1942.5	3.0	12.1	4.1		0
	2800	OTTA	21 GRF	1945.0	2010.0	70.0	8.4	3.8		
	2800	OTTA	1 S	1948.0	1951.0	6.0	5.0	2.5		
	15400	PALE	8 S	1948.8	1950.3	2.0	30.0			QL=6 ST=2 TYP=3
	9400	HUAN	4 S/F	1949.0	1950.5	3.2	22.5	9.3		R
	8800	SGMR	8 S	1950.1	1950.6	.7	26.0			QL=6 ST=2 TYP=3
	4995	SGMR	8 S	1950.3	1950.6	.3	13.0			QL=6 ST=2 TYP=3
	9400	HUAN	2 S/F	1955.0	1955.5	2.2	11.3	4.6		R
	9400	HUAN	1 S	2003.3	2003.7	1.5	10.4	3.5		L
	15400	PALE	8 S	2015.3	2015.3	.2	21.0			QL=6 ST=2 TYP=3
	9400	HUAN	1 S	2050.8	2052.2	2.4	8.7	5.9		0
	208	VORO	4 S/F	2100.0E		360.0D		10.0		
	4995	SGMR	8 S	2102.3	2102.8	.7	19.0			QL=6 ST=2 TYP=3
	9400	HUAN	1 S	2102.4	2103.6	3.2	9.5	6.2		0
	100	HIRA	42 SER	2102.6	2119.9	34.0	4400.0			WL
	8800	SGMR	8 S	2103.1	2103.5	.4D	20.0			QL=6 ST=2 TYP=3
	2800	OTTA	20 GRF	2110.0	2117.0	25.0	3.2	1.6		
	208	VORO	4 S/F	2119.5	2120.0	.5	150.0			
	9400	HUAN	45 C	2143.8	2147.0	5.9	104.0	46.3		L
	3750	TYKW	45 C	2144.0	2147.1	72.0	68.0	17.0U		RAIN
	2800	OTTA	21 GRF	2144.0	2223.0	205.0	32.0	10.6		
	15400	SGMR	47 GB	2144.6	2147.0	3.5	100.0			QL=6 ST=2 TYP=5
	4995	SGMR	47 GB	2144.8	2147.0	3.5	73.0			QL=6 ST=2 TYP=5
	15400	PALE	47 GB	2144.8	2147.1	3.3	96.0			QL=6 ST=2 TYP=5
	2000	TYKW	45 C	2145.0	2147.2	5.0	11.0	3.0		
	2800	OTTA	46F C	2145.0	2147.0	5.0	28.0	11.2		
	8800	SGMR	47 GB	2145.0	2147.0	3.1	80.0			QL=6 ST=2 TYP=5
	2695	SGMR	4 S/F	2145.0	2147.0	2.8	36.0			QL=6 ST=2 TYP=3
	8800	PALE	47 GB	2145.0	2147.1	3.6	100.0			QL=6 ST=2 TYP=5
	4995	PALE	47 GB	2145.0	2147.1	3.3	82.0			QL=6 ST=2 TYP=5
	2695	PALE	4 S/F	2145.1	2147.1	2.5	39.0			QL=6 ST=2 TYP=3
	2000	TYKW	21 GRF	2153.0	2210.0	60.0	8.0	4.0		
	1000	TYKW	45 C	2153.5	2154.1	1.5	9.0	1.5		
	2800	OTTA	8 S	2154.1	2154.3	.3	5.0			
	9400	HUAN	45 C	2155.2	2158.1	6.6	29.5	9.3		0
	15400	PALE	47 GB	2155.6	2158.8	3.7	67.0			QL=6 ST=2 TYP=5
	4995	SGMR	4 S/F	2156.8	2158.6	2.8	29.0			QL=6 ST=2 TYP=3
	4995	PALE	4 S/F	2156.8	2158.6	2.8	36.0			QL=6 ST=2 TYP=3
	2695	SGMR	4 S/F	2156.8	2158.8	6.3	32.0			QL=6 ST=2 TYP=3
	2695	PALE	4 S/F	2156.8	2158.8	3.8	32.0			QL=6 ST=2 TYP=3
	2000	TYKW	45 C	2157.0	2159.1	10.0	11.0	3.0		
	2800	OTTA	3 S	2157.0	2159.0	5.0	12.6	5.0		
	245	PALE	47 GB	2157.8	2158.1	.3	60.0			QL=6 ST=2 TYP=5
	9395	PEKG	3 S	2251.0	2252.9	4.0	15.2	4.3		
	1000	TYKW	8 S	2251.2	2251.3	.2	32.0	8.0		
	3750	TYKW	45 C	2256.0	2326.1	62.0	310.0	35.0		
	1000	TYKW	21 GRF	2300.0	0011.0	200.0	4.0	2.0		
	2000	TYKW	28 PRE	2302.0	2317.1	19.0	9.0	3.5		
	2695	PENT	28 PRE	2313.0	2315.5	8.0	14.6	10.4		
	9395	PEKG	3 S	2315.0	2319.5	9.0	45.6	5.4		
	8800	PALE	8 S	2315.1	2316.8	2.0	24.0			QL=6 ST=3 TYP=3
	2840	PEKG	1 S	2317.0	2319.5	4.0	7.0	1.7		
	2000	TYKW	45 C	2321.0	2326.2	34.0	71.0	20.0		
	2695	PENT	3 S	2321.0	2326.0	13.0	159.0	54.0		
	2695	MANI	3 S	2321.0	2326.4	12.0	180.0	60.0		
	8800	PALE	49 GB	2322.3	2325.8	32.8	630.0			QL=6 ST=2 TYP=6
	17000	NOBE	3 S	2322.3	2325.9	5.3	315.0			R
	4995	PALE	47 GB	2322.6	2325.8	19.9	330.0			QL=6 ST=2 TYP=5
	15400	PALE	47 GB	2322.8	2325.8	11.2	480.0			QL=6 ST=2 TYP=5
	2695	PALE	47 GB	2322.8	2326.1	20.5	189.0			QL=6 ST=2 TYP=5

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
13	4995	MANI	3	S	2323.0	2326.2	6.0	174.0	58.0		
	8800	MANI	3	S	2323.5	2326.0	6.0	281.1	93.7		
	2695	SGMR	47	GB	2323.8	2325.8	4.5	60.0			QL=4 ST=2 TYP=5
	4995	LEAR	47	GB	2324.6E	2325.8	6.4D	400.0			QL=3 ST=2 TYP=5
	8800	LEAR	49	GB	2324.6E	2325.8	6.4D	740.0			QL=3 ST=2 TYP=6
	2695	LEAR	47	GB	2324.6E	2326.3	3.2D	200.0			QL=3 ST=2 TYP=5
	100	HIRA	42	SER	2324.6	2339.6	19.7	1200.0			0
	8800	SGMR	47	GB	2324.8	2325.8	3.5	200.0			QL=4 ST=2 TYP=5
	1000	TYKW	5	S	2325.0	2325.8	3.0	3.0	1.0		
	245	PALE	47	GB	2325.0	2325.3	.3	160.0			QL=6 ST=2 TYP=5
	4995	SGMR	47	GB	2325.1	2325.6	3.2	150.0			QL=4 ST=2 TYP=5
	15400	LEAR	47	GB	2325.3E	2325.8	1.3D	360.0			QL=3 ST=2 TYP=5
	1415	PALE	8	S	2325.6	2325.8	.2	13.0			QL=6 ST=2 TYP=3
	17000	NOBE	29	PBI	2327.6	2327.6	60.0	63.0			R
	2695	PENT	29	PBI	2334.0	2334.0	30.0	27.0	17.1		
	9400	TYKW	45	C	2335.0E	2342.5U	40.0D	60.0U	30.0D		RAIN
	245	LEAR	47	GB	2339.1	2339.8	1.0	180.0			QL=6 ST=2 TYP=5
	9395	PEKG	20	GRF	2341.0	2352.8	34.0	13.9	9.2		
	2000	TYKW	29	PBI	2355.0		75.0	7.0	3.5		
	3750	TYKW	29	PBI	2358.0		70.0	8.0U	4.0		RAIN
14	33	UPIC	44	NS	0330.0E		794.0D				
	200	GORK	44	NS	0342.0E		428.0D		5.0		
	100	GORK	44	NS	0345.0E		73.0D		5.0		
	260	ONDR	44	NS	0608.0E	0628.0U	483.0D	178.0			
	100	GORK	43	NS	0645.0		134.0		10.0		
	127	TORN	43	NS	0646.0		474.0		8.0		V1,DISTURBED
	245	SGMR	43	NS	0929.0	2016.5	869.0D	119.0			QL=6 ST=2 TYP=1
	245	PALE	43	NS	1957.0	1957.5		100.0			QL=6 ST=3 TYP=1
	410	PALE	43	NS	1957.1	1957.5		66.0			QL=6 ST=3 TYP=1
	208	VORO	44	NS	2100.0E		360.0D		6.0		
	245	LEAR	43	NS	2319.0	0557.6	610.0D	80.0			QL=6 ST=2 TYP=1
	410	LEAR	4	S/F	0008.8	0008.8	8.0	13.0			QL=6 ST=2 TYP=3
	9400	TYKW	30	PBI	0015.0		65.0	25.0	12.0		
	9400	TYKW	5	S	0049.0	0049.6	1.5	6.0	2.0		
	100	HIRA	46	C	0104.1	0104.5	1.7	5000.0	1430.0		0
	3750	TYKW	5	S	0113.0	0116.0	10.0	8.0	2.5		
	9400	TYKW	5	S	0115.0	0116.0	4.0	7.0	3.0		
	1000	TYKW	8	S	0116.2	0116.3	.4	13.0	4.0		
	9400	TYKW	28	PRE	0126.0U	0133.1	15.0U	12.0	4.0U		RAIN
	3750	TYKW	45	C	0132.0	0133.0	4.0	60.0	12.0		
	2840	PEKG	3	S	0132.0	0133.0	6.0	59.9	10.8		
	17000	NOBE	20	GRF	0132.2	0145.2	80.0	37.0			R
	2000	TYKW	45	C	0132.5	0132.7	3.0	12.0	4.0		
	2695	PENT	3	S	0132.5	0133.0	4.0	31.0	7.8		
	2695	PALE	8	S	0132.6	0132.8	.5	49.0			QL=6 ST=2 TYP=3
	2695	LEAR	4	S/F	0132.6	0132.8	4.9	46.0			QL=6 ST=2 TYP=3
	4995	PALE	8	S	0132.6	0133.0	.7	48.0			QL=6 ST=2 TYP=3
	4995	LEAR	4	S/F	0132.6	0133.0	4.9	46.0			QL=6 ST=2 TYP=3
	2695	MANI	3	S	0132.8	0133.3	1.3	64.9	21.6		
	4995	MANI	3	S	0132.8	0133.3	1.3	34.8	11.6		
	15400	LEAR	4	S/F	0133.1	0134.6	4.4	41.0			QL=6 ST=2 TYP=3
	15400	PALE	8	S	0134.0	0134.3	.8	23.0			QL=6 ST=2 TYP=3
	3750	TYKW	30	PBI	0136.0		95.0	6.0	3.0		
	3750	TYKW	45	C	0138.0	0143.1	12.0	7.0	2.0		
	2840	PEKG	29	PBI	0138.0	0143.6	39.0	10.5	8.7		
	2000	TYKW	8	S	0138.4	0138.6	.4	13.0	3.0		
	9395	PEKG	45	C	0140.0	0143.5	10.0	29.9	9.2		
	9400	TYKW	45	C	0141.0	0143.4	12.0	42.0	16.0		
	410	LEAR	8	S	0142.1	0143.0	1.7	40.0			QL=6 ST=2 TYP=3
	500	HIRA	45	C	0142.4	0142.8	6.0	12.0	5.0		0
	2000	TYKW	5	S	0142.5	0143.5	2.5	7.0	2.0		
	1000	TYKW	45	C	0142.5	0143.6	6.0	9.0	2.5		
	410	PALE	8	S	0142.6	0143.0	1.0	41.0			QL=6 ST=2 TYP=3
	245	LEAR	47	GB	0142.8	0143.0	1.0	119.0			QL=6 ST=2 TYP=5
	8800	PALE	8	S	0142.8	0143.3	.8	36.0			QL=6 ST=2 TYP=3
	15400	PALE	8	S	0144.8	0145.0	.7	30.0			QL=6 ST=2 TYP=3
	9395	PEKG	29	PBI	0150.0	0152.0	66.0	16.2	4.1		
	3750	TYKW	20	GRF	0151.0	0202.0	40.0	6.0	2.5		
	9400	TYKW	29	PBI	0153.0		50.0	12.0	6.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
14	2000	TYKW	21	GRF	0155.0	0202.5	40.0	4.0	2.0		
	2000	TYKW	45	C	0157.8	0157.9	1.5	6.0	.7		
	2000	TYKW	5	S	0208.2	0208.6	.8	3.0	1.0		
	1000	TYKW	45	C	0208.3	0208.6	2.0	3.0	.7		
	100	HIRA	46	C	0208.4	0208.5	1.4	10000.0	2570.0		WL
	410	LEAR	47	GB	0212.1	0212.1	.2	119.0			QL=6 ST=3 TYP=5
	9100	GORK	23	GRF	0251.6		558.0D				
	9400	TYKW	20	GRF	0310.0	0328.0	45.0	10.0	5.0		INTERFERENCE
	2000	TYKW	21	GRF	0312.0	0337.0	60.0	5.0	2.0		
	3750	TYKW	20	GRF	0324.0	0336.0	35.0	7.0	3.0		
	100	HIRA	8	S	0332.3	0332.6	.6	1000.0			0
	100	HIRA	8	S	0348.1	0348.2	.4	3100.0			WL
	100	GORK	8	S	0348.1	0348.4	.7	110.0D			
	2000	TYKW	5	S	0350.3	0350.6	.5	5.0	1.0		
	650	GORK	21	GRF	0402.2	0704.4	486.0D	10.0			
	9400	TYKW	45	C	0409.0	0423.5	17.0	68.0	12.0		
	3750	TYKW	5	S	0413.0	0420.0	25.0	3.0	1.5		
	8800	LEAR	8	S	0414.6	0415.1	1.2	16.0			QL=6 ST=3 TYP=3
	8800	LEAR	20	GRF	0416.6	0420.3	8.0	24.0			QL=6 ST=2 TYP=2
	2950	GORK	21	GRF	0418.2E	0836.6	4186.0D	33.0			
	15400	LEAR	8	S	0419.1	0419.3	.4	20.0			QL=6 ST=2 TYP=3
	100	GORK	46	C	0421.5	0421.7	2.0	110.0D			
	100	GORK			0421.5	0422.8		260.0			
	9395	PEKG	3	S	0422.0	0423.5	3.0	48.4	6.7		
	200	GORK	46	C	0422.5	0423.5	3.3	130.0			
	200	GORK			0422.5	0425.8		60.0			
	100	HIRA	46	C	0422.6		3.4	10000.0D	2130.0D		
	9100	GORK	4	S/F	0422.8	0423.7	2.4	44.0			
	3750	TYKW	5	S	0423.0	0423.6	3.0	8.0	1.5		
	2000	TYKW	5	S	0423.0	0423.7	3.0	3.0	1.0		
	2840	PEKG	1	S	0423.0	0423.6	2.0	9.7	2.2		
	4995	LEAR	8	S	0423.3	0423.6	.5	22.0			QL=6 ST=2 TYP=3
	8800	ATHN	8	S	0423.3	0423.6	1.7	19.0			QL=6 ST=2 TYP=3
	17000	NOBE	1	S	0423.4	0423.6	.6	36.0			0
	1000	TYKW	5	S	0423.4	0424.0	2.5	1.5	.7		
	4995	ATHN	4	S/F	0423.5	0423.6	4.5	9.0			QL=6 ST=2 TYP=3
	2950	GORK	1	S	0423.5	0423.9	9.0	4.8			
	9400	TYKW	30	PBI	0426.0		28.5	12.0	12.0		
	9400	TYKW	5	S	0429.0	0432.5	7.0	6.0	2.0		
	9400	TYKW	45	C	0438.0	0440.7	15.0	43.0	6.0		
	3750	TYKW	28	PRE	0441.0	0445.0	14.0	5.0	3.0		
	2000	TYKW	28	PRE	0443.0	0455.0	12.0	2.0	1.0		
	2840	PEKG	28	PRE	0443.0		12.5	3.1	.7		
	9395	PEKG	3	S	0454.0	0457.0	5.0	80.7	27.8		
	6100	KISV	21	GRF	0454.0	0510.0	30.0	37.0			
	9400	TYKW	45	C	0454.5	0457.0	59.5	113.0	27.0		
	17000	NOBE	1	S	0454.7	0455.2	1.7	46.0			R
	15000	KISV			0454.8	0455.3		34.0			
	15400	LEAR	47	GB	0454.8	0457.0	25.3	119.0			QL=6 ST=2 TYP=5
	15000	KISV	45	C	0454.8	0457.1	3.0	82.0			
	2000	TYKW	45	C	0455.0	0457.1	20.0	19.0	7.0		
	3750	TYKW	45	C	0455.0	0457.1	30.0	89.0	23.0		
	8800	ATHN	47	GB	0455.0	0457.1	11.6	50.0			QL=6 ST=2 TYP=5
	4995	ATHN	47	GB	0455.1	0457.1	11.7	64.0			QL=6 ST=2 TYP=5
	8800	LEAR	47	GB	0455.3	0457.0	24.8	88.0			QL=6 ST=2 TYP=5
	2695	ATHN	4	S/F	0455.3	0457.1	12.3	48.0			QL=6 ST=2 TYP=3
	2840	PEKG	3	S	0455.5	0457.0	4.1	67.8	20.8		
	2695	MANI	4	S/F	0455.5	0457.0	2.7	55.3	18.4		
	2695	LEAR	47	GB	0455.6	0457.1	24.5	60.0			QL=6 ST=2 TYP=5
	17000	NOBE	1	S	0456.4	0457.0	11.0	82.0			L
	4995	MANI	4	S/F	0456.5	0457.0	1.7	105.6	35.2		
	8800	MANI	4	S/F	0456.5	0457.0	1.1	78.0	25.0		
	4995	LEAR	47	GB	0456.6	0457.0	23.5	71.0			QL=6 ST=2 TYP=5
	6100	KISV	4	S/F	0456.7	0457.2	1.5	39.0			
	2840	PEKG	29	PBI	0459.6	0509.4	60.4	26.6	14.6		
	2000	TYKW	29	PBI	0515.0		50.0	5.0	2.5		
	35000	NAGO	20	GRF	0520.0	0625.0	170.0D	140.0			SUNSET
	3750	TYKW	30	PBI	0525.0		50.0	14.0	7.0		
	410	LEAR	47	GB	0529.8	0529.8	.2	93.0			QL=6 ST=2 TYP=5
	245	LEAR	8	S	0550.0	0550.1	.1	10.0			QL=6 ST=2 TYP=3

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
14	410	LEAR	8	S	0550.0	0550.1	.3	26.0			QL=6 ST=2 TYP=3
	650	GORK	40	F	0552.0	0554.3	3.0	26.0			
	410	LEAR	47	GB	0553.1	0553.1	.2	130.0			QL=6 ST=2 TYP=5
	245	LEAR	47	GB	0553.1	0553.1	.2	94.0			QL=6 ST=2 TYP=5
	9400	TYKW	30	PBI	0554.0		20.0	21.0	20.0		
	610	LEAR	8	S	0554.0	0554.1	.3	16.0			QL=6 ST=3 TYP=3
	410	LEAR	8	S	0554.0	0554.1	.3	21.0			QL=6 ST=3 TYP=3
	245	LEAR	8	S	0554.0	0554.1	.1	10.0			QL=6 ST=3 TYP=3
	1415	LEAR	8	S	0554.0	0554.1	.3	5.0			QL=6 ST=3 TYP=3
	1000	TYKW	45	C	0554.0	0554.2	.4	6.0	1.0		
	9400	TYKW	5	S	0559.5	0559.8	2.5	17.0	3.0		
	17000	NOBE	28	PRE	0559.5	0623.4	23.9	31.0			R
	15400	LEAR	8	S	0559.6	0559.8	1.9	26.0			QL=6 ST=2 TYP=3
	15000	KISV	28	PRE	0559.7	0559.9	1.0	36.0			
	6100	KISV	28	PRE	0600.0	0621.0	21.0	11.0			
	2695	ATHN	49	GB	0612.1	0625.3	79.2	1199.0			QL=6 ST=2 TYP=6
	4995	ATHN	49	GB	0613.8	0625.3	77.5	1500.0			QL=2 ST=2 TYP=6
	8800	ATHN	49	GB	0613.8	0625.8	77.5	1500.0			QL=2 ST=2 TYP=6
	2000	TYKW	45	C	0614.0	0615.3	2.5	8.0	2.0		
	9400	TYKW	28	PRE	0614.0	0621.0	7.0	32.0	26.0		
	100	HIRA	45	C	0614.5	0615.4	1.4	390.0	156.0		WL
	1000	TYKW	45	C	0614.5	0615.5	1.5	30.0	5.0		
	3750	TYKW	28	PRE	0615.0	0620.0	5.0	9.0	7.0		
	2840	PEKG	28	PRE	0615.0		6.0	6.8	2.8		
	100	GORK	4	S/F	0615.0	0615.5U	1.8	140.0D			
	950	GORK	28	PRE	0615.2	0615.7	.9	14.0			
	2000	TYKW	28	PRE	0619.0	0619.6	2.0	21.0	3.0		
	3750	TYKW	47	GB	0620.0	0624.9	40.0	1660.0	250.0		
	4995	LEAR	49	GB	0620.0	0624.8	52.6	2000.0			QL=6 ST=2 TYP=6
	9395	PEKG	47	GB	0620.0	0625.3	11.0	2280.0	493.0		
	8800	LEAR	49	GB	0620.1	0625.1	52.5	2399.0			QL=6 ST=2 TYP=6
	536	ONDR	4	S/F	0620.2	0623.7	11.3	84.0	75.0		
	808	ONDR	4	S/F	0620.4	0626.8	13.0	131.0	87.0		
	4995	MANI	47	GB	0620.5	0624.2	23.8	4600.0	1819.0		
	2000	TYKW	45	C	0621.0	0625.1	39.0	465.0	80.0		
	9400	TYKW	47	GB	0621.0	0625.3	29.0	2420.0	370.0		
	1000	TYKW	45	C	0621.0	0625.7	29.0	230.0	45.0		
	15000	KISV	47	GB	0621.0		9.0	500.0D			
	2840	PEKG	47	GB	0621.0	0624.8	13.0	814.0			
	6100	KISV	47	GB	0621.0	0624.8	9.0	910.0			
	8800	MANI	47	GB	0621.0	0624.9	23.3	2350.0	868.0		
	6100	KISV			0621.0	0625.2		886.0			
	9100	GORK	47	GB	0621.0	0625.4	25.0	2110.0			
	6100	KISV			0621.0	0626.4		750.0			
	3100	CRIM	3	S	0621.0	0636.6	27.0	976.0	325.0		
	2695	MANI	47	GB	0621.2	0624.5	23.8	2050.0	796.0		
	500	HIRA	45	C	0621.4	0621.6	21.0	110.0	20.0		ML
	410	LEAR	49	GB	0621.6	0624.0	12.5	760.0			QL=6 ST=2 TYP=6
	15400	LEAR	49	GB	0621.6	0625.1	51.0	1699.0			QL=6 ST=2 TYP=6
	2650	DWIN	49	GB	0622.0	0625.0	10.0	550.0D			
	3000	IZMI	48	C	0622.0	0625.2	12.0	940.0	470.0		
	606	MANI	3	S	0622.0	0625.4	10.0	80.4	26.8		
	1415	MANI	3	S	0622.0	0625.9	23.5	194.4	64.8		
	1415	ATHN	47	GB	0622.0	0626.6	71.3	169.0			QL=6 ST=2 TYP=5
	950	GORK	46	C	0622.2	0625.8	351.0D	162.0			
	950	GORK			0622.2	0626.7		161.0			
	650	GORK	4	S/F	0622.3	0626.0	16.7	160.0			
	2695	LEAR	49	GB	0622.5	0624.8	50.1	1000.0			QL=6 ST=2 TYP=6
	2950	GORK	4	S/F	0622.5	0627.2	5.6	1200.0			
	8400	BERN	47	GB	0623.0U	0625.0U	30.0U	828.0D			ONLY PAPER REC
	19600	BERN	47	GB	0623.0U	0625.0U	30.0D	1900.0U			ONLY PAPER REC
	610	LEAR	47	GB	0623.1	0625.8	18.4	200.0			QL=6 ST=2 TYP=5
	1415	LEAR	47	GB	0623.3	0625.8	38.0	210.0			QL=6 ST=2 TYP=5
	17000	NOBE	47	GB	0623.4	0625.3	11.2	1520.0			L-R
	35000	NAGO	5	S	0624.0	0624.0	1.0	160.0			
	245	LEAR	47	GB	0624.5	0624.6	5.6	60.0			QL=6 ST=2 TYP=5
	204	IZMI	41	F	0627.0	0627.5	3.4	110.0			
	200	HIRA	46	C	0627.3	0628.2	3.3	100.0	15.0		0
	15000	KISV	29	PBI	0630.0	0630.0	200.0	330.0			
	6100	KISV	29	PBI	0630.0	0630.0	200.0	295.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
14	9395	PEKG	29	PBI	0631.0		50.0	259.0	71.6		
	536	ONDR	29	PBI	0631.8	0639.2					
	808	ONDR	29	PBI	0633.0		17.0				
	2840	PEKG	29	PBI	0634.0		59.0	82.0	14.9		
	17000	NOBE	29	PBI	0634.6	0634.6	48.0	103.0			R
	204	IZMI	25	R	0635.0	0659.8	60.0	38.0	15.0		
	950	GORK	30	PBI	0635.7	0635.7	350.0D	27.0			
	200	HIRA	46	C	0636.0	0659.0	65.0	37.0	14.0		WR
	200	GORK	27	RF	0638.0	0659.8	61.5	45.0			
	100	HIRA	46	C	0644.6	0712.6	78.0	370.0	110.0		WL
	950	GORK	4	S/F	0647.0	0647.3	1.5	24.0			
	3100	CRIM	30	PBI	0648.0	0648.0	156.0	51.0	18.0		
	9400	TYKW	30	PBI	0650.0		150.0D	150.0	55.0D		
	536	ONDR	4	S/F	0652.0	0653.3	5.0	11.0	8.0		
	500	HIRA	45	C	0652.0	0653.3	2.3	10.0	4.0		0
	650	GORK	4	S/F	0652.1	0653.2	2.9	30.0			
	1415	LEAR	8	S	0652.8	0653.1	.5	38.0			QL=6 ST=2 TYP=3
	1000	TYKW	45	C	0652.8	0653.2	1.5	31.0	7.0		
	610	LEAR	8	S	0652.8	0654.1	2.0	39.0			QL=6 ST=2 TYP=3
	245	LEAR	47	GB	0653.0	0653.3	.3	330.0			QL=6 ST=2 TYP=5
	808	ONDR	4	S/F	0653.0	0653.6	1.7	19.0	19.0		
	2000	TYKW	30		0700.0		135.0D	28.0	17.0D		
	3750	TYKW	30	PBI	0700.0		140.0D	54.0	20.0D		
	1000	TYKW	45	C	0706.5	0707.6	7.5	13.0	2.0		
	950	GORK	2	S/F	0707.0	0707.4	4.3	7.0			
	430	KRAK	42	SER	0737.9	0754.8	138.0	600.0D			
	950	GORK	1	S	0746.2	0746.8	1.0	45.0			
	1000	TYKW	45	C	0746.3	0746.7	1.0	9.0	2.0		
	9395	PEKG	21	GRF	0750.0	0759.0	35.0	11.4	6.1		
	2840	PEKG	21	GRF	0750.0	0800.1	34.0	8.9	6.8		
	9395	PEKG	1	S	0754.0	0757.2	4.0	9.5	3.8		
	610	LEAR	8	S	0755.1	0755.3	.2	20.0			QL=6 ST=2 TYP=3
	245	LEAR	49	GB	0755.3	0755.3	30.0	940.0			QL=6 ST=2 TYP=6
	410	LEAR	47	GB	0755.3	0755.3	.2	410.0			QL=6 ST=2 TYP=5
	9400	TYKW	5	S	0756.0	0757.2	10.0	12.0	3.0		
	3750	TYKW	5	S	0756.0	0757.2	3.0	10.0	4.0		
	2000	TYKW	5	S	0756.0	0757.3	12.0	3.0	1.0		
	2840	PEKG	3	S	0756.6	0757.2	1.4	11.2	2.5		
	2950	GORK	1	S	0757.0	0757.5	.9	3.6			
	1000	TYKW	5	S	0758.6	0758.7	1.0	3.0	.7		
	3750	TYKW	29	PBI	0759.0		20.0	4.0	2.0		
	100	HIRA	42	SER	0805.7	0806.1	21.5	5600.0			WL
	127	TORN	4	S/F	0805.8	0806.5	1.8	4500.0	2300.0		
	1000	TYKW	5	S	0806.0	0806.6	2.0	2.5	1.0		
	204	IZMI	4	S/F	0806.0	0806.5	1.0	100.0			
	9400	TYKW	45	C	0809.0	0813.1	9.0	16.0	3.0		
	100	GORK	4	S/F	0814.1	0814.5	1.3	160.0D			
	3750	TYKW	45	C	0825.0	0832.1	30.0	46.0	12.0		
	3100	CRIM	20	GRF	0825.0	0832.0	31.0	17.0	6.0		
	100	GORK	41	F	0825.3	0825.5	2.0	160.0D			
	100	GORK			0825.3	0826.5		160.0D			
	6100	KISV	20	GRF	0826.0	0827.7	15.0	17.0			
	2840	PEKG	45	C	0826.0	0832.0	17.0	18.5	6.5		
	9400	TYKW	5	S	0826.5	0827.4	5.0	16.0	9.0		
	2000	TYKW	45	C	0826.5	0836.0	30.0	6.0	3.0		
	1000	TYKW	45	C	0826.5	0842.2	23.0	7.0	1.0		
	9100	GORK	1	S	0826.7	0827.8	3.4	14.0			
	9395	PEKG	3	S	0826.8	0827.8	5.2	23.7	7.3		
	2950	GORK	1	S	0827.0	0827.7	1.5	3.6			
	9400	TYKW	29	PBI	0831.5		1.4	6.0	3.0		
	2950	GORK	1	S	0832.0	0832.3	1.0	3.6			
	6100	KISV	4	S/F	0841.7	0842.0	1.0	50.0U			
	8400	BERN	3	S	0847.0U	0848.0U	1.0D	36.0			ONLY PAPER REC
	9395	PEKG	3	S	0847.0	0848.1	3.0	34.7	6.4		
	9100	GORK	3	S	0847.2	0848.3	2.2	37.0			
	9400	TYKW	5	S	0847.5	0848.0	2.0	28.0	9.0		
	2840	PEKG	3	S	0848.0	0848.0	2.0	13.5	4.9		
	2950	GORK	1	S	0848.0	0848.3	.8	7.3			
	3750	TYKW	29	PBI	0855.0		15.0	6.0	3.0		
	950	GORK	2	S/F	0914.4	0915.0	.7	10.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
14	15000	KISV	2	S/F	0914.6	0914.8	1.0	21.0			
	3100	CRIM	26	FAL	0925.0	0946.0		7.0			
	15000	KISV	2	S/F	0929.8	0930.2	.5	12.0			
	15000	KISV	2	S/F	0933.4	0933.8	4.0	17.0			
	204	IZMI	41	F	1111.0	1117.0	28.0	70.0			
	4995	SGMR	20	GRF	1129.6	1133.3	13.7	30.0			QL=6 ST=2 TYP=2
	8800	SGMR	20	GRF	1129.8	1133.5	15.0	44.0			QL=5 ST=2 TYP=2
	6100	KISV	21	GRF	1130.0	1133.7	14.0	17.0			
	9100	GORK	1	S	1131.5	1133.8	2.3	15.0			
	950	GORK	4	S/F	1133.2	1135.1	5.0	34.0			
	930	BORD	41	F	1133.6	1135.2	4.4	74.0	3.0		
	3100	CRIM	1	S	1134.0	1134.8	4.0	8.0	3.0		
	810	KRAK	2	S/F	1134.5	1135.2	4.1	17.0	4.0		
	430	KRAK	41	F	1134.5	1136.5	3.2	28.0			
	2950	GORK	1	S	1134.7	1135.5	3.8	9.8			
	650	GORK	4	S/F	1134.8	1136.8	3.4	64.0			
	808	ONDR	4	S/F	1134.9	1135.4	5.0	20.0	10.0		
	2800	OTTA	3	S	1135.0	1135.5	1.0	12.0	6.0		
	536	ONDR	40	F	1135.0	1137.8	4.2	25.0	16.0		
	2800	OTTA	29	PBI	1136.0	1136.0	4.5	4.8	-2.4		
	9400	HUAN	21	GRF	1221.0	1228.1	21.8	22.8	11.6		0
	9400	HUAN	2	S/F	1222.1	1223.4	2.0	13.2	9.5		0
	2800	OTTA	21	GRF	1225.0	1315.0	125.0	26.8	10.0		
	6100	KISV	21	GRF	1226.0	1230.7	11.0	9.0			
	9400	HUAN	1	S	1229.7	1230.6	1.7	5.3	2.2		0
	2650	DWIN	1	S	1230.0	1230.0	2.0	10.0	5.0		
	9400	HUAN	2	S/F	1232.8	1235.5	3.7	14.1	4.6		L
	2800	OTTA	4	S/F	1234.0	1235.5	6.0	12.4	5.0		
	4995	SGMR	4	S/F	1234.3	1235.5	3.2	23.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	1235.3	1235.5	1.5	20.0			QL=6 ST=2 TYP=3
	2800	OTTA	2	S/F	1253.5	1254.2	2.5	5.8	2.6		
	15000	KISV	32	ABS	1255.0	1304.4	11.0	-37.0			
	11800	BERN	4	S/F	1300.0U	1308.8	35.0D	405.0			
	8400	BERN	4	S/F	1300.0U	1309.2	35.0D	130.0			
	6100	KISV	28	PRE	1301.0	1307.0	6.0	15.0			
	9400	HUAN	45	C	1302.9	1309.1	8.7	205.7	88.7		R
	8800	ATHN	47	GB	1305.0	1307.6	19.1	119.0			QL=6 ST=2 TYP=5
	2800	OTTA	4	S/F	1306.0	1307.5	7.5	21.6	10.4		
	2695	ATHN	4	S/F	1306.5	1307.6	17.6	24.0			QL=6 ST=2 TYP=3
	4995	ATHN	47	GB	1306.5	1307.6	17.6	61.0			QL=6 ST=2 TYP=5
	2650	DWIN	2	S/F	1307.0	1307.0	5.0	10.0	5.0		
	6100	KISV	45	C	1307.0	1307.6	4.0	65.0			
	6100	KISV			1307.0	1309.1		53.0			
	8800	SGMR	47	GB	1307.0	1309.1	11.6	180.0			QL=6 ST=2 TYP=5
	19600	BERN	4	S/F	1307.0U	1309.2	12.0U	62.0			
	4995	SGMR	47	GB	1307.1	1307.6	11.5	86.0			QL=6 ST=2 TYP=5
	15400	SGMR	47	GB	1307.1	1308.5	3.4	130.0			QL=6 ST=2 TYP=5
	2695	SGMR	4	S/F	1307.3	1307.6	6.5	34.0			QL=6 ST=2 TYP=3
	15000	KISV	45	C	1307.7	1308.8	5.5	203.0			
	15000	KISV			1307.7	1308.8		173.0			
	410	SGMR	8	S	1309.0	1309.1	.8	20.0			QL=6 ST=2 TYP=3
	245	SGMR	8	S	1309.1	1309.1	.2	24.0			QL=6 ST=2 TYP=3
	6100	KISV	29	PBI	1311.0	1311.0	43.0	23.0			
	9400	HUAN	30	PBI	1311.6	1311.6	202.7	70.3	16.2		R
	15000	KISV	29	PBI	1313.0	1313.0	4.0	22.0			
	2000	TYKW	30	PBI	1355.0		65.0	1.5	.7		
	2800	OTTA	1	S	1355.9	1356.0	1.0	6.2	2.6		
	930	BORD	41	F	1407.6	1408.3	1.4	30.0	2.0		
	930	BORD	41	F	1420.0	1421.4	1.6	50.0	2.0		
	410	SGMR	8	S	1429.1	1429.3	.2	16.0			QL=6 ST=2 TYP=3
	8800	ATHN	47	GB	1437.5	1441.1	13.8	100.0			QL=6 ST=2 TYP=5
	9400	HUAN	4	S/F	1439.2	1442.0	5.3	126.6	60.1		R
	8400	BERN	3	S	1440.0	1441.6	4.0U	93.0			
	2695	ATHN	4	S/F	1440.3	1441.1	2.5	17.0			QL=6 ST=2 TYP=3
	4995	ATHN	4	S/F	1440.3	1441.1	3.0	43.0			QL=6 ST=2 TYP=3
	1415	ATHN	8	S	1440.5	1441.1	1.5	41.0			QL=6 ST=2 TYP=3
	2800	OTTA	3	S	1440.5	1441.5	4.0	14.8	5.0		
	8800	SGMR	47	GB	1440.5	1441.6	7.6	110.0			QL=6 ST=2 TYP=5
	15400	SGMR	47	GB	1440.5	1441.6	3.3	100.0			QL=6 ST=2 TYP=5
	4995	SGMR	47	GB	1440.6	1441.6	3.2	56.0			QL=6 ST=2 TYP=5

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
14	11800	BERN	3	S	1441.0	1441.6	4.0U	122.0			
	2695	SGMR	8	S	1441.1	1442.6	1.5D	26.0			QL=6 ST=2 TYP=3
	2800	OTTA	22	GRF	1455.0	1506.0	85.0	18.4	6.2		
	2650	DWIN	2	S/F	1500.0	1505.0	10.0	20.0	10.0		
	9400	HUAN	2	S/F	1601.8	1603.2	4.3	11.4	7.4		R
	9400	HUAN	1	S	1612.4	1614.8	4.9	10.5	6.5		0
	9400	HUAN	3	S	1628.0	1628.5	1.7	47.5	19.1		R
	8400	BERN	3	S	1628.0	1628.6	1.0U	34.0			
	11800	BERN	3	S	1628.0	1628.6	1.0U	68.0			
	8800	ATHN	8	S	1628.1	1628.8	1.4	28.0			QL=6 ST=2 TYP=3
	2800	OTTA	23	GRF	1700.0	1930.0	435.0	44.0	18.2		
	9400	HUAN	1	S	1705.0	1706.0	2.5	8.8	4.6		0
	15400	SGMR	47	GB	1705.6	1705.8	.7	98.0			QL=6 ST=2 TYP=5
	15400	PALE	47	GB	1705.8	1706.0	.7	89.0			QL=6 ST=2 TYP=5
	19600	BERN	3	S	1705.8	1706.0	1.0U	50.0			
	11800	BERN	3	S	1705.8	1706.0	1.0U	69.0			
	9400	HUAN	23	GRF	1717.2	1828.3	161.4	38.7	16.1		R
	610	SGMR	8	S	1738.1	1738.3	.2	17.0			QL=6 ST=2 TYP=3
	410	SGMR	8	S	1738.5	1739.1	.6D	18.0			QL=6 ST=2 TYP=3
	15400	PALE	47	GB	1811.8	1816.6		160.0			QL=6 ST=3 TYP=5
	8800	SGMR	47	GB	1812.0	1816.6	16.0	239.0			QL=6 ST=2 TYP=5
	8800	PALE	47	GB	1812.1	1817.0		290.0			QL=6 ST=3 TYP=5
	2800	OTTA	3	S	1814.0	1817.0	9.0	58.0	17.0		
	9400	HUAN	3	S	1814.4	1817.0	9.5	228.5	72.4		R
	15400	SGMR	47	GB	1814.5	1816.6	14.3	130.0			QL=6 ST=2 TYP=5
	4995	SGMR	47	GB	1814.6	1816.8	10.9	119.0			QL=6 ST=2 TYP=5
	2650	DWIN	4	S/F	1815.0	1817.0	5.0	50.0	30.0		
	4995	PALE	47	GB	1815.1	1817.0		130.0			QL=6 ST=3 TYP=5
	2695	SGMR	47	GB	1815.3	1816.8	10.2	60.0			QL=6 ST=2 TYP=5
	2695	PALE	47	GB	1816.3	1816.8		67.0			QL=6 ST=3 TYP=5
	410	SGMR	4	S/F	1816.5	1816.6	12.5	34.0			QL=6 ST=2 TYP=3
	1415	PALE	8	S	1816.8	1817.8		13.0			QL=6 ST=3 TYP=3
	2800	OTTA	3	S	1845.0	1846.2	9.0	12.0	5.6		
	9400	HUAN	2	S/F	1845.4	1845.8	4.5	17.6	7.2		R
	245	SGMR	8	S	1845.6	1846.0	.4	53.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	1845.8	1846.0	2.0	16.0			QL=6 ST=2 TYP=3
	4995	SGMR	4	S/F	1846.0	1846.3	2.1	17.0			QL=6 ST=2 TYP=3
	245	PALE	47	GB	1951.6	1951.8	.2	52.0			QL=6 ST=2 TYP=5
	500	HIRA	8	S	2018.4	2018.6	.3	30.0			0
	100	HIRA	42	SER	2022.7	2023.4	11.6	110.0			WL
	9400	HUAN	21	GRF	2023.1	2046.5	30.0	12.3	4.8		0
	9400	HUAN	1	S	2029.6	2030.5	2.3	10.5	5.6		0
	9400	HUAN	1	S	2033.2	2034.2	2.2	13.2	3.5		0
	9400	HUAN	1	S	2041.7	2044.1	4.1	14.1	7.7		R
	8800	PALE	8	S	2042.8	2043.6	1.0	26.0			QL=6 ST=2 TYP=3
	15400	PALE	8	S	2043.3	2043.6	.5	44.0			QL=6 ST=2 TYP=3
	9400	HUAN	20	GRF	2106.8	2112.3	41.6	4.4	1.8		0
	9400	TYKW	21		2130.0U	2146.0	95.0U	11.0	6.0		
	15400	SGMR	8	S	2137.0	2137.1	.3	28.0			QL=6 ST=2 TYP=3
	8800	SGMR	8	S	2137.0	2137.1	.1	18.0			QL=6 ST=2 TYP=3
	3750	TYKW	21	GRF	2140.0	2146.0	60.0	4.0	2.0		
	9400	HUAN	4	S/F	2156.6	2158.7	5.1	77.4	19.6		R
	9400	TYKW	5	S	2157.0	2158.4	8.0	70.0	10.0		
	3750	TYKW	5	S	2158.0	2158.4	3.0	16.0	7.0		
	8800	SGMR	47	GB	2158.0	2158.3	3.3	89.0			QL=6 ST=2 TYP=5
	15400	SGMR	8	S	2158.1	2158.3	.5	43.0			QL=6 ST=2 TYP=3
	15400	PALE	47	GB	2158.1	2158.3	.9	67.0			QL=6 ST=2 TYP=5
	4995	SGMR	8	S	2158.1	2158.5	1.5	48.0			QL=6 ST=2 TYP=3
	4995	PALE	47	GB	2158.1	2158.6	1.5	50.0			QL=6 ST=2 TYP=5
	8800	PALE	47	GB	2158.1	2158.6	2.7	89.0			QL=6 ST=2 TYP=5
	3750	TYKW	29	PBI	2201.0		25.0	4.0	1.5		
	9400	TYKW	5	S	2208.0	2213.0	25.0	10.0	5.0		
	9400	TYKW	5	S	2239.0	2243.0	20.0	8.0	4.0		
	2840	PEKG	28	PRE	2306.0	2321.0	15.0	14.3	5.8		
	3750	TYKW	5	S	2308.0	2311.0	25.0	3.0	1.5		
	9400	TYKW	45	C	2311.0	2313.6	4.0	15.0	5.0		
	245	SGMR	8	S	2312.1	2312.5	1.2	68.0			QL=6 ST=2 TYP=3
	410	SGMR	8	S	2312.3	2312.5	1.0	26.0			QL=6 ST=2 TYP=3
	9400	TYKW	29	PBI	2315.0		20.0	6.0	3.0		
	2840	PEKG	3	S	2315.0	2315.6	2.0	11.4	5.2		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
14	9395	PEKG	3	S	2316.0	2325.9	69.0	482.0	89.4		
	2930	VORO	3	S	2320.0	2325.0	15.0	238.0			
	2840	PEKG	3	S	2321.0	2326.1	11.0	205.0	23.3		
	2840	PEKG	30	PBI	2332.0		30.0	36.8	25.6		
	2840	PEKG	1	S	2340.0	2341.7	4.0	10.0	4.3		
15	410	LEAR	43	NS	0207.8	0818.8	441.2D	46.0			QL=6 ST=2 TYP=1
	100	GORK	43	NS	0305.0		378.0D		5.0		
	200	GORK	44	NS	0308.0E		372.0D		10.0		
	33	UPIC	43	NS	0400.0		702.9				
	260	ONDR	44	NS	0544.0E	0838.0U	497.0D	47.0			
	204	IZMI	43	NS	0800.0		240.0D	25.0			
	127	TORN	44	NS	0900.0E	1414.1	370.0D	70.0	5.0		VO
	245	SGMR	43	NS	0929.0	2032.3	869.0D	270.0			QL=6 ST=2 TYP=1
	245	PALE	43	NS	1630.0	0001.0	736.0D	450.0			QL=6 ST=2 TYP=1
	410	PALE	43	NS	1630.0	0203.8	736.0D	110.0			QL=6 ST=2 TYP=1
	200	HIRA	44	NS	1917.0E	0200.0	875.0D	60.0	30.0		WL
	100	HIRA	44	NS	1917.0E	0212.0	875.0D	200.0	25.0		ML
	245	PALE	43	NS	1957.0	0121.8	539.0D	230.0			QL=6 ST=2 TYP=1
	410	PALE	43	NS	1957.1	2322.5	538.9D	63.0			QL=6 ST=2 TYP=1
	208	VORO	44	NS	2100.0E	0203.0	360.0D	69.0	21.0		
	245	LEAR	43	NS	2319.0	0530.6	610.0D	290.0			QL=6 ST=2 TYP=1
	1000	TYKW	45	C	0008.0	0008.4	2.0	4.5	1.5		
	9400	TYKW	45	C	0011.0	0021.0	18.0	15.0	5.0		
	17000	NOBE	7	C	0016.8	0018.3	10.0	19.0			R
	3750	TYKW	28	PRE	0019.0	0021.1	11.5	7.0	3.0		
	2000	TYKW	5	S	0020.0	0021.2	8.0	2.0	.7		
	35000	NAGO	5	S	0029.0	0030.0	6.0	240.0			
	9400	TYKW	47	GB	0030.0	0030.7	12.0	1020.0	160.0		
	2930	VORO	47	GB	0030.0	0032.0	15.0	718.0D			
	17000	NOBE	45	C	0030.2	0030.6	10.0	643.0			L
	8800	LEAR	49	GB	0030.3	0030.6	10.8	1000.0			QL=6 ST=2 TYP=6
	8800	PALE	49	GB	0030.3	0030.6	6.5	1100.0			QL=6 ST=2 TYP=6
	4995	LEAR	49	GB	0030.3	0031.1	10.2	1300.0			QL=6 ST=2 TYP=6
	15400	PALE	49	GB	0030.3	0031.1	5.5	700.0			QL=6 ST=2 TYP=6
	4995	PALE	49	GB	0030.3	0031.1	8.3	1600.0			QL=6 ST=2 TYP=6
	15400	LEAR	49	GB	0030.3	0031.3	9.3	730.0			QL=6 ST=2 TYP=6
	1000	TYKW	45	C	0030.5	0030.7	14.5	74.0	6.0		
	2695	LEAR	49	GB	0030.5	0031.3	19.1	810.0			QL=6 ST=2 TYP=6
	2695	PALE	49	GB	0030.5	0031.3	7.1	810.0			QL=6 ST=2 TYP=6
	3750	TYKW	47	GB	0030.5	0031.3	14.5	1230.0	220.0		
	2000	TYKW	45	C	0030.5	0031.4	14.5	370.0	95.0		
	2695	PENT	47	GB	0030.5	0031.5	13.0	850.0	230.0		
	1415	LEAR	47	GB	0030.6	0032.6	11.5	68.0			QL=6 ST=2 TYP=5
	1415	PALE	47	GB	0030.6	0033.3	7.2	77.0			QL=6 ST=2 TYP=5
	8800	MANI	47	GB	0030.8	0031.1	6.2	2800.0	1057.0		
	4995	MANI	47	GB	0030.8	0031.5	9.7	3280.0	1164.0		
	2695	MANI	47	GB	0030.8	0031.6	12.2	810.3	270.1		
	1415	MANI	3	S	0030.8	0034.0	7.2	85.2	28.4		
	610	LEAR	4	S/F	0032.3	0032.5	2.5	37.0			QL=6 ST=2 TYP=3
	9400	TYKW	30	PBI	0042.0		225.0	10.0	5.0		
	2695	PENT	29	PBI	0043.5	0043.5	65.0D	22.2			
	1000	TYKW	30	PBI	0045.0		180.0	3.0	1.5		
	2000	TYKW	30	PBI	0045.0		220.0	15.0	7.0		
	3750	TYKW	30	PBI	0045.0		220.0	19.0	9.0		
	100	HIRA	41	F	0100.0	0111.9	17.3	125.0			WR
	3750	TYKW	20	GRF	0105.0	0110.0	30.0	3.0	1.5		
	9400	TYKW	28	PRE	0108.0	0208.0	69.0	28.0	14.0		
	3750	TYKW	28	PRE	0137.0	0148.0	11.0	6.0	3.0		
	2000	TYKW	28	PRE	0139.0	0150.0	11.0	3.0	1.5		
	9400	TYKW	5	S	0143.0	0144.0	4.0	10.0	2.5		
	1000	TYKW	5	S	0143.9	0144.0	.5	1.5	.5		
	3750	TYKW	45	C	0148.0	0154.3	15.0	48.0	13.0		
	9395	PEKG	28	PRE	0148.0		20.0	33.1	5.5		
	2000	TYKW	5	S	0150.0	0154.3	8.0	15.0	6.0		
	2840	PEKG	3	S	0150.0	0154.2	10.0	26.5	13.1		
	1000	TYKW	5	S	0150.5	0151.8	2.5	1.0	.3		
	9400	TYKW	45	C	0151.0	0154.3	12.0	17.0	5.0		
	4995	LEAR	4	S/F	0151.1	0154.3	7.9	40.0			QL=6 ST=2 TYP=3
	2695	LEAR	4	S/F	0151.3	0154.1	6.2	43.0			QL=6 ST=2 TYP=3

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
15	8800	LEAR	4	S/F	0151.6	0154.3	7.9	27.0			QL=6 ST=2 TYP=3
	9395	PEKG	3	S	0153.0	0154.5	4.0	13.1	4.0		
	4995	PALE	4	S/F	0153.1	0154.3	2.2	31.0			QL=6 ST=2 TYP=3
	2695	MANI	3	S	0153.3	0154.1	3.7	37.8	12.6		
	4995	MANI	3	S	0153.3	0154.2	3.7	22.2	7.4		
	1000	TYKW	5	S	0153.5	0155.0	3.5	2.0	.7		
	15400	LEAR	4	S/F	0154.3	0155.8	4.7	18.0			QL=6 ST=2 TYP=3
	9395	PEKG	3	S	0157.5	0158.2	2.5	33.2	6.7		
	2000	TYKW	29	PBI	0158.0		17.0	4.0	2.0		
	3750	TYKW	30	PBI	0203.0		14.0	9.0	9.0		
	3750	TYKW	5	S	0207.0	0209.0	8.0	2.0	1.0		
	9395	PEKG	46	C	0208.0	0212.0	12.0	637.0	213.0		
	35000	NAGO	20	GRF	0208.0	0250.0	117.0	100.0			
	2840	PEKG	45	C	0210.0	0212.3	7.0	134.0	55.9		
	2840	PEKG	21	GRF	0216.0	0243.2	64.0	15.5	12.8		
	9395	PEKG	45	C	0216.5	0219.3	73.5	318.0	119.0		
	9400	TYKW	45	C	0217.0	0219.5	113.0	306.0	93.0		
	3750	TYKW	45	C	0217.0	0219.8	60.0	112.0	30.0		
	3750	TYKW			0217.0	0247.6		46.0			
	9400	TYKW			0217.0	0247.8		225.0			
	2840	PEKG	29	PBI	0217.0		125.0	39.0	15.5		
	17000	NOBE	7	C	0217.3	0219.3	120.0	169.0			R
	15400	PALE	49	GB	0217.3	0219.3	89.8	280.0			QL=6 ST=2 TYP=6
	17000	NOBE			0217.3	0247.7		132.0			R
	17000	NOBE			0217.3	0356.5		23.0			R
	2000	TYKW	5	S	0217.5	0220.1	8.5	12.0	7.0		
	8800	LEAR	47	GB	0217.6	0219.3	72.7	300.0			QL=6 ST=2 TYP=5
	8800	MANI	3	S	0217.7	0219.7	6.8	294.3	98.1		
	4995	MANI	3	S	0217.7	0220.0	6.8	210.9	70.3		
	15400	LEAR	47	GB	0217.8	0219.1	72.5	210.0			QL=6 ST=2 TYP=5
	8800	PALE	47	GB	0217.8	0219.5	54.3	330.0			QL=6 ST=2 TYP=5
	4995	PALE	47	GB	0218.0	0219.8	51.3	180.0			QL=6 ST=2 TYP=5
	2695	MANI	3	S	0218.0	0220.1	7.0	39.3	13.1		
	4995	LEAR	47	GB	0218.1	0219.6	60.0	160.0			QL=6 ST=2 TYP=5
	2840	PEKG	3	S	0218.5	0219.7	5.5	28.7	9.3		
	2695	LEAR	4	S/F	0218.6	0219.6	8.0	39.0			QL=6 ST=2 TYP=3
	2695	PALE	8	S	0219.6	0219.6	.2	36.0			QL=6 ST=2 TYP=3
	9395	PEKG	29	PBI	0220.0		95.0	117.0	40.1		
	2000	TYKW	30	PBI	0226.0		36.0	5.0	2.5		
	2000	TYKW	5	S	0243.0	0243.2	1.0	3.0	.7		
	2000	TYKW	5	S	0245.0	0245.4	1.5	1.0	.5		
	9100	GORK	23	GRF	0300.0E		540.0D				
	2950	GORK	21	GRF	0304.0E	0306.0	225.0D	2*.0			
	3750	TYKW	30	PBI	0317.0		60.0	20.0	10.0		
	1000	TYKW	45	C	0323.0	0326.2	6.0	2.0	.5		
	100	HIRA	42	SER	0323.0	0323.3	3.0	3000.0			WL
	2000	TYKW	8	S	0323.5	0323.6	.2	12.0	3.0		
	2000	TYKW	45	C	0325.0	0326.8	4.0	20.0	5.0		
	3750	TYKW	45	C	0325.0	0326.9	6.0	20.0	3.0		
	2950	GORK	4	S/F	0326.2	0326.9	3.4	22.0			
	1415	MANI	1	S	0326.4	0326.6	1.1	5.9	2.0		
	2695	MANI	3	S	0326.4	0326.6	1.6	22.7	7.6		
	4995	LEAR	8	S	0326.8	0326.8	1.2	10.0			QL=6 ST=2 TYP=3
	2695	LEAR	8	S	0326.8	0326.8	1.2	22.0			QL=6 ST=2 TYP=3
	2000	TYKW	29	PBI	0329.0		15.0	4.0	1.5		
	15400	LEAR	8	S	0356.1	0356.3	.4	20.0			QL=6 ST=2 TYP=3
	200	GORK	8	S	0401.4	0401.4	.4	40.0			
	9400	TYKW	30	PBI	0410.0		20.0	11.0	5.0		
	9400	TYKW	5	S	0416.4	0416.7	1.5	4.0	1.5		
	100	HIRA	8	S	0431.3	0431.5	.3	810.0			WL
	245	LEAR	47	GB	0431.3	0431.5	.3	470.0			QL=6 ST=2 TYP=5
	410	LEAR	8	S	0431.3	0431.5	.3	10.0			QL=6 ST=2 TYP=3
	100	GORK	8	S	0431.5	0431.6	.5	150.0D			
	9400	TYKW	28	PRE	0435.0	0436.3	14.0	10.0	3.0		
	2000	TYKW	21	GRF	0442.0	0505.0	130.0	8.0	4.0		
	1000	TYKW	21	GRF	0442.0	0506.0	130.0	3.0	1.5		
	3750	TYKW	21	GRF	0443.0	0505.0	130.0	20.0	8.0		
	650	GORK	23	GRF	0444.3	0833.3	436.0D	17.0			
	9400	TYKW	45	C	0449.0	0500.7	18.0	20.0	14.0		
	2840	PEKG	20	GRF	0449.0	0456.0	65.0	16.7	6.2		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
15	9395	PEKG	20	GRF	0449.0	0503.0	28.0	12.8	7.6		
	4995	LEAR	20	GRF	0453.6	0458.0	9.5	20.0			QL=6 ST=2 TYP=2
	2695	LEAR	20	GRF	0453.8	0455.5	1.7D	16.0			QL=6 ST=2 TYP=2
	100	HIRA	27	RF	0456.0	0531.0	100.0	50.0	14.0		0
	8800	LEAR	20	GRF	0500.3	0501.0	.7D	11.0			QL=6 ST=2 TYP=2
	3100	CRIM	1	S	0502.2	0503.0	2.0	8.0	3.0		
	3100	CRIM	29	PBI	0504.0	0504.2	16.0	6.0	2.0		
	9400	TYKW	30	PBI	0507.0		44.0	15.0	14.0		
	15000	KISV	21	GRF	0519.0	0523.8	15.0	27.0			
	9400	TYKW	5	S	0523.0	0523.8	2.0	12.0	4.0		
	9395	PEKG	3	S	0523.0	0523.8	6.0	16.4	4.8		
	9400	TYKW	29	PBI	0525.0		24.0	3.0	1.5		
	1000	TYKW	45	C	0548.0	0559.7	60.0	5.0	1.0		
	9400	TYKW	28	PRE	0551.0	0602.0	11.0	24.0	19.0		
	17000	NOBE	3	S	0557.6	0603.8	13.2	148.0			R
	2840	PEKG	20	GRF	0601.0	0603.0	22.0	6.3	3.3		
	8800	ATHN	47	GB	0601.8	0603.8	30.2	88.0			QL=6 ST=2 TYP=5
	4995	ATHN	4	S/F	0601.8	0603.8	29.5	38.0			QL=6 ST=2 TYP=3
	9400	TYKW	45	C	0602.0	0603.7	45.0	130.0	40.0D		
	9400	TYKW			0602.0	0608.3		65.0			
	4995	MANI	3	S	0602.0	0603.5	3.0	40.0	13.3		
	8300	MANI	3	S	0602.0	0603.5	2.5	104.6	34.9		
	9395	PEKG	45	C	0602.0	0603.8	10.0	110.0	40.5		
	19600	BERN	3	S	0602.0	0603.8	2.0	112.0			ONLY PAPER REC
	15000	KISV	4	S/F	0602.2	0603.2	4.0	170.0			
	9100	GORK	46	C	0602.4	0603.8	7.5	97.0			
	9100	GORK			0602.4	0608.3		30.0			
	2695	LEAR	4	S/F	0602.5	0603.6	3.3	10.0			QL=6 ST=2 TYP=3
	8800	LEAR	47	GB	0602.5	0603.8	13.3	110.0			QL=6 ST=2 TYP=5
	15400	LEAR	47	GB	0602.5	0603.8	13.3	169.0			QL=6 ST=2 TYP=5
	2695	ATHN	4	S/F	0602.6	0604.1	9.2	5.0			QL=6 ST=2 TYP=3
	4995	LEAR	4	S/F	0602.8	0603.6	13.0	37.0			QL=6 ST=2 TYP=3
	3750	TYKW	45	C	0603.0E	0603.8	17.0D	20.0	10.0D		
	2000	TYKW	5	S	0603.0	0604.0	20.0	1.5	.7		
	245	LEAR	47	GB	0605.1	0605.6	.7	330.0			QL=6 ST=2 TYP=5
	204	IZMI	5	S	0605.5	0605.5	0.8	40.0	30.0		
	15000	KISV	29	PBI	0606.2	0606.2	45.0	43.0			
	15000	KISV	3	S	0607.4	0608.2	2.0	20.0			
	17000	NOBE	29	PBI	0610.8	0610.8	40.0	34.0			R
	3750	TYKW	29	PBI	0620.0E		30.0D	8.0	3.5D		
	9400	TYKW	30	PBI	0647.0		35.0	19.0	9.0		
	15000	KISV	21	GRF	0655.0	0706.6	17.0	49.0			
	410	LEAR	8	S	0657.6	0657.6	.2	16.0			QL=6 ST=2 TYP=3
	2000	TYKW	28	PRE	0700.0	0805.3	68.0	8.0	2.0		
	9400	TYKW	5	S	0701.0	0702.0	4.0	3.0	1.5		
	3750	TYKW	5	S	0701.0E	0702.3	4.0D	2.0	1.0D		
	2950	GORK	21	GRF	0701.0	1037.5	300.0D	91.0			
	9400	TYKW	45	C	0708.0	0711.4	8.0	35.0	7.0		
	9395	PEKG	3	S	0711.5	0712.5	3.5	31.8	5.3		
	8400	BERN	3	S	0711.7	0712.4	2.0	12.0			
	11800	BERN	3	S	0711.7	0712.4	2.0	18.0			
	15400	LEAR	8	S	0711.8	0712.3	1.3	24.0			QL=6 ST=2 TYP=3
	8800	LEAR	8	S	0711.8	0712.5	1.2	28.0			QL=6 ST=2 TYP=3
	9100	GORK	1	S	0711.8	0712.5	1.3	33.0	15.0		
	3750	TYKW	5	S	0717.0	0718.3	3.0	3.0	1.0		
	9400	TYKW	5	S	0717.5	0717.7	2.0	6.0	2.0		
	3750	TYKW	20	GRF	0720.0	0732.0	35.0	5.0	2.0		
	9400	TYKW	28	PRE	0730.0	0805.8	39.0	14.0	7.0		
	950	GORK	21	GRF	0731.4	0753.1	264.0D	5.0			
	11800	BERN	4	S/F	0751.7	0816.3	70.0D	178.0			
	8400	BERN	4	S/F	0751.7	0816.4	70.0D	236.0			
	19600	BERN	4	S/F	0751.7	0816.4	40.0U	88.0			
	1000	TYKW	45	C	0752.0	0753.1	6.0	3.0	1.0		
	200	HIRA	8	S	0800.0	0800.1	.3	160.0			0
	100	GORK	42	SER	0800.0	0800.2	109.0	200.0D			
	100	GORK			0800.0	0809.4		200.0D			
	536	ONDR	42	SER	0800.0	0819.8	68.0	78.0			
	200	GORK	8	S	0800.1	0800.1	.7	40.0D			
	808	ONDR	42	SER	0801.2	0809.5	76.0				
	200	GORK	27	RF	0803.5	0829.5	50.0	30.0			

SOLAR RADIO EMISSION
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JUNE 1982

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
15	2950	GORK	46	C	0803.8	0812.0	27.9	104.0			
	2950	GORK			0803.8	0813.4		109.0			
	2950	GORK			0803.8	0819.2		188.0			
	2950	GORK			0803.8	0829.7		21.0			
	1000	TYKW	45	C	0804.0	0819.4	38.0	230.0	25.0		
	606	MANI	46	C	0804.0	0818.3	36.0	127.6	42.5		
	1415	MANI	46	C	0804.0	0819.0	38.0	177.9	59.3		
	950	GORK	4	S/F	0804.2	0805.5	2.0	16.0			
	610	LEAR	47	GB	0804.3	0805.5	2.3	81.0			QL=6 ST=2 TYP=5
	410	LEAR	4	S/F	0804.3	0805.5	2.3	23.0			QL=6 ST=2 TYP=3
	500	HIRA	45	C	0804.5	0805.3	1.0	35.0	15.0		WR
	650	GORK	46	C	0804.6	0810.4U	21.8	70.0D			
	650	GORK			0804.6	0819.2		87.0			
	6100	KISV	28	PRE	0804.9	0808.9	4.0	6.0			
	3750	TYKW	5	S	0805.0	0805.7	2.0	4.0	1.5		
	2695	ATHN	47	GB	0805.0	0819.3	67.1	239.0			QL=6 ST=2 TYP=5
	4995	ATHN	47	GB	0805.5	0816.3	65.5	270.0			QL=6 ST=2 TYP=5
	1415	ATHN	47	GB	0805.5	0819.3	73.6	150.0			QL=6 ST=2 TYP=5
	2000	TYKW	45	C	0808.0	0819.2	38.0	157.0	40.0		
	3750	TYKW	45	C	0808.0	0819.2	38.0	220.0	60.0		
	8800	ATHN	47	GB	0808.0	0816.3	69.8	200.0			QL=6 ST=2 TYP=5
	2695	MANI	46	C	0808.0	0819.0	33.5	161.6	53.9		
	3100	CRIM	46	C	0808.0	1216.5	248.5U	162.0			
	3100	CRIM			0808.0	1219.0		192.0	65.0		
	3100	CRIM			0808.0	1229.6		126.0			
	500	HIRA	45	C	0808.1	0817.2	36.0	230.0	20.0		WR
	410	LEAR	47	GB	0808.3	0810.1	12.5	50.0			QL=6 ST=3 TYP=5
	4995	MANI	46	C	0808.4	0818.9	33.6	197.6	65.9		
	15000	KISV			0808.5	0813.5		81.0			
	15000	KISV			0808.5	0816.5		134.0			
	15000	KISV	46	C	0808.5	0819.2	18.0	144.0			
	950	GORK	47	GB	0808.7	0810.4	17.4	88.0			
	950	GORK			0808.7	0819.4		173.0			
	950	GORK			0808.7	0821.1		75.0			
	610	LEAR	47	GB	0808.8	0810.3	12.0	360.0			QL=6 ST=2 TYP=5
	2695	LEAR	47	GB	0808.8	0811.3	12.0	88.0			QL=6 ST=2 TYP=5
	430	KRAK	27	RF	0808.8	0817.4	73.0	200.0	22.0		
	430	KRAK			0808.8	0837.3		80.0			
	9400	TYKW	45	C	0809.0	0816.4	33.0	235.0	80.0		
	6100	KISV			0809.0	0812.0		110.0			
	6100	KISV			0809.0	0813.5		160.0			
	9395	PEKG	45	C	0809.0	0816.4	28.0	212.0	80.7		
	6100	KISV	46	C	0809.0	0816.5	16.0	180.0			
	8800	MANI	46	C	0809.0	0818.9	21.0	287.8	95.9		
	3000	IZMI	46	C	0809.0	0819.0	13.0	135.0	50.0		
	6100	KISV			0809.0	0819.2		170.0			
	9395	PEKG			0809.0	0819.2		216.0			
	930	BORD			0809.0	0839.5		192.0			
	930	BORD	42	SER	0809.0E	0853.8	59.0U	229.0	10.0		
	8800	LEAR	47	GB	0809.1	0811.1	11.7	76.0			QL=6 ST=2 TYP=5
	4995	LEAR	47	GB	0809.1	0811.1	11.7	110.0			QL=6 ST=2 TYP=5
	810	KRAK	42	SER	0809.2	0810.4	64.0	520.0			
	9100	GORK	46	C	0809.2	0813.5	14.4	180.0			
	9100	GORK			0809.2	0816.4		234.0			
	9100	GORK			0809.2	0819.1		230.0			
	810	KRAK			0809.2	0838.3		160.0			
	810	KRAK			0809.2	0857.2		130.0			
	245	LEAR	47	GB	0809.3	0809.6	11.5	39.0			QL=6 ST=2 TYP=5
	1415	LEAR	47	GB	0809.3	0811.5	11.5	49.0			QL=6 ST=2 TYP=5
	200	HIRA	46	C	0809.3	0838.0	58.0	37.0	12.0		WR
	15400	LEAR	47	GB	0810.1	0811.3	10.7	30.0			QL=6 ST=2 TYP=5
	4995	LEAR	47	GB	0820.8	0820.8	12.8	230.0			QL=6 ST=2 TYP=5
	2695	LEAR	47	GB	0820.8	0820.8	12.8	200.0			QL=6 ST=2 TYP=5
	1415	LEAR	47	GB	0820.8	0820.8	12.8	169.0			QL=6 ST=2 TYP=5
	410	LEAR	47	GB	0820.8	0820.8	12.8	50.0			QL=6 ST=2 TYP=5
	8800	LEAR	47	GB	0820.8	0820.8	12.8	260.0			QL=6 ST=2 TYP=5
	15400	LEAR	47	GB	0820.8	0820.8	12.8	130.0			QL=6 ST=2 TYP=5
	610	LEAR	47	GB	0820.8	0820.8	12.8	360.0			QL=6 ST=2 TYP=5
	410	LEAR	4	S/F	0820.8	0821.8	12.8	35.0			QL=6 ST=2 TYP=3
	245	LEAR	47	GB	0820.8	0822.1	12.8	70.0			QL=6 ST=2 TYP=5

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
15	6100	KISV	29	PBI	0824.5	0824.5	60.0	30.0			
	15000	KISV	29	PBI	0826.5	0827.0	22.0	23.0			
	15000	KISV	2	S/F	0828.0	0829.8	10.0	40.0			
	3000	IZMI	7	C	0828.0	0830.0	7.0	94.0	37.0		
	6100	KISV	4	S/F	0828.3	0829.8	9.0	63.0			
	9100	GORK	3	S	0828.5	0829.8	6.0	70.0			
	950	GORK	46	C	0833.0	0836.2	8.1	52.0			
	950	GORK			0833.0	0840.8		42.0			
	650	GORK	4	S/F	0834.3	0837.3	6.8	22.0	6.0		
	9400	TYKW	30	PBI	0842.0		40.0D	24.0	20.0D		
	1000	TYKW	30	PBI	0842.0		30.0	3.0	1.5		
	1000	TYKW	45	C	0844.0	0844.7	3.0	22.0	3.0		
	2950	GORK	1	S	0844.4	0844.7	.6	7.9	3.8		
	1415	LEAR	8	S	0844.5	0844.6	.1	13.0			QL=6 ST=2 TYP=3
	950	GORK	46	C	0845.0	0847.6	15.0	162.0			
	950	GORK			0845.0	0849.0		146.0			
	950	GORK			0845.0	0900.3		90.0			
	3750	TYKW	30	PBI	0846.0		35.0	10.0	6.0		
	2000	TYKW	30	PBI	0846.0		30.0	6.0	3.0		
	1000	TYKW	45	C	0847.0	0856.1	23.0	240.0	12.0		
	9400	TYKW	45	C	0849.0	0851.1	26.0	45.0	16.0D		
	15000	KISV	21	GRF	0849.0	0851.1	20.0	74.0			
	6100	KISV	21	GRF	0849.6	0851.1	20.0	12.0			
	8800	LEAR	47	GB	0850.1	0851.0	2.7	57.0			QL=6 ST=2 TYP=5
	9100	GORK	3	S	0850.2	0851.1	3.7	45.0			
	15400	LEAR	47	GB	0850.5	0851.0	2.3	54.0			QL=6 ST=2 TYP=5
	650	GORK	40	F	0851.0	0858.1	13.7	19.0			
	2000	TYKW	45	C	0855.3	0856.3	1.5	12.0	4.0		
	3750	TYKW	45	C	0855.4	0855.7	1.5	10.0	3.0		
	1415	LEAR	47	GB	0855.5	0855.8	5.1	84.0			QL=6 ST=2 TYP=5
	8800	LEAR	4	S/F	0859.1	0859.3	27.0	13.0			QL=6 ST=2 TYP=3
	410	LEAR	47	GB	0912.8	0912.8	3.2	75.0			QL=6 ST=2 TYP=5
	9100	GORK	1	S	0943.2	0943.8	1.4	20.0			
	15000	KISV	28	PRE	1012.0	1018.0	6.0	17.0			
	6100	KISV	28	PRE	1013.0	1018.0	5.0	15.0			
	9100	GORK	47	GB	1017.6	1020.3	48.0	7400.0			
	4995	SGMR	49	GB	1017.8	1020.3	18.5	1300.0			QL=6 ST=2 TYP=6
	15000	KISV	47	GB	1018.0	1020.0U	7.0	2240.0D			
	8800	SGMR	49	GB	1018.0	1020.3	18.3	2199.0			QL=6 ST=2 TYP=6
	6100	KISV	47	GB	1018.0	1020.5	6.0	740.0			
	2650	DWIN	3	S	1018.0	1021.0	5.0	140.0	70.0		
	15400	SGMR	49	GB	1018.5	1020.3	17.8	3300.0			QL=6 ST=2 TYP=6
	35000	BERN	47	GB	1018.5	1020.3	50.0D	1916.0			
	11800	BERN	47	GB	1018.5	1020.4	120.0	2694.0			
	19600	BERN	47	GB	1018.5	1020.4	120.0	2649.0			
	3100	CRIM	3	S	1018.5	1020.6	18.0	236.0	78.0		
	8400	BERN	47	GB	1018.5	1020.8U	120.0	2054.0D			
	2950	GORK	4	S/F	1018.5	1020.8	15.0	130.0			
	2695	SGMR	47	GB	1018.6	1020.6	17.7	189.0			QL=6 ST=2 TYP=5
	3000	IZMI	5	S	1019.0	1021.0	6.0	182.0	100.0		
	536	ONDR	42	SER	1020.3	1023.6	15.0	133.0			
	1415	SGMR	4	S/F	1022.3	1023.6	14.0	22.0			QL=6 ST=2 TYP=3
	430	KRAK	46	C	1022.5	1032.7	12.3	350.0	7.0		
	410	SGMR	47	GB	1022.6	1024.0	13.7	76.0			QL=6 ST=2 TYP=5
	2650	DWIN		PBI	1023.0	1025.0	400.0				
	6100	KISV	29	PBI	1024.0	1024.0	150.0	176.0			
	15000	KISV	29	PBI	1025.0	1025.0	150.0	335.0			
	3000	IZMI	29	PBI	1025.0	1025.0	4.0	60.0			
	930	BORD	41	F	1025.4	1025.7	.3	52.0	2.0		
	610	SGMR	4	S/F	1027.6	1030.1	8.7	34.0			QL=6 ST=2 TYP=3
	4995	SGMR	47	GB	1036.3	1037.1	41.7	169.0			QL=6 ST=2 TYP=5
	8800	SGMR	47	GB	1036.3	1037.5	41.7	239.0			QL=6 ST=2 TYP=5
	15400	SGMR	47	GB	1036.3	1037.5	41.7	300.0			QL=6 ST=2 TYP=5
	2695	SGMR	47	GB	1036.3	1038.3	41.7	92.0			QL=6 ST=2 TYP=5
	1415	SGMR	20	GRF	1036.3	1038.8	28.5	39.0			QL=6 ST=2 TYP=2
	3100	CRIM	29	PBI	1036.5	1036.5		86.0			
	2800	OTTA	21	GRF	1040.0	1100.0	265.0D	88.0			
	245	SGMR	8	S	1043.6	1043.6	.2	38.0			QL=6 ST=2 TYP=3
	610	SGMR	8	S	1046.6	1046.8	.4	19.0			QL=6 ST=2 TYP=3
	930	BORD	41	F	1119.0	1121.3	8.0	114.0	2.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
15	9400	HUAN	29	PBI	1138.6E	1138.6U	95.9D	184.2	74.4		R
	430	KRAK	42	SER	1153.2	1159.6	20.0	48.0			
	930	BORD	8	S	1220.1	1220.1	.1	36.0	1.0		
	8800	ATHN	47	GB	1331.6	1335.6	6.7	67.0			QL=6 ST=2 TYP=5
	8400	BERN	20	GRF	1332.5	1335.2	17.0	38.0			
	11800	BERN	20	GRF	1332.5	1335.2	17.0	38.0			
	9400	HUAN	45	C	1332.7	1335.1	6.8	67.9	38.0		R
	15000	KISV	20	GRF	1333.0	1335.5	7.0	42.0			
	4995	ATHN	4	S/F	1334.8	1336.0	3.5	13.0			QL=6 ST=2 TYP=3
	15400	SGMR	4	S/F	1335.1	1335.3	3.0	29.0			QL=6 ST=2 TYP=3
	8800	SGMR	47	GB	1336.3	1336.6	3.8	60.0			QL=6 ST=2 TYP=5
	9400	HUAN	29	PBI	1339.5	1339.5	6.7	19.7	12.5		R
	4995	ATHN	47	GB	1349.8	1351.1	5.3	83.0			QL=6 ST=2 TYP=5
	8800	ATHN	47	GB	1349.8	1351.1	10.0	219.0			QL=6 ST=2 TYP=5
	9400	HUAN	45	C	1349.8	1351.3	3.4	275.4	79.6		R
	11800	BERN	3	S	1350.0	1351.0	14.0	188.0			
	8400	BERN	3	S	1350.0	1351.0	14.0	170.0			
	19600	BERN	3	S	1350.0	1351.0	14.0	47.0			
	2800	OTTA	3	S	1350.0	1351.1	2.0	11.4	5.0		
	15000	KISV	8	S	1350.5	1351.1	2.0	183.0			
	2695	ATHN	8	S	1350.6	1351.1	1.4	16.0			QL=6 ST=2 TYP=3
	9400	HUAN	29	PBI	1353.2	1353.2	6.5	17.9	5.4		R
	808	ONDR	8	S	1358.3	1358.3	.1	8.0			
	4995	ATHN	47	GB	1405.3	1414.8	38.5	380.0			QL=6 ST=2 TYP=5
	8800	ATHN	49	GB	1405.3	1414.8	38.5	890.0			QL=6 ST=2 TYP=6
	2695	PENT	28	PRE	1406.0	1409.0	7.0	14.2	7.1		
	536	ONDR	8	S	1406.4	1406.5	.1	7.0			
	9400	HUAN	45	C	1407.1	1416.7	14.0	500.6	159.0		R
	8800	SGMR	49	GB	1407.6	1408.5	22.0	50.0			QL=6 ST=2 TYP=7
	2695	ATHN	47	GB	1407.6	1414.8	25.4	250.0			QL=6 ST=2 TYP=5
	930	BORD	8	S	1408.0	1408.1	.1	31.0	1.0		
	4995	SGMR	49	GB	1408.0	1408.6	22.6	44.0			QL=6 ST=2 TYP=7
	15400	SGMR	49	GB	1408.3	1408.6	22.7	28.0			QL=6 ST=2 TYP=7
	1415	ATHN	47	GB	1409.6	1414.8	23.4	139.0			QL=6 ST=2 TYP=5
	2695	SGMR	49	GB	1411.0	1416.0	16.6	219.0			QL=6 ST=2 TYP=7
	2800	OTTA	4	S/F	1413.0	1416.0	9.0	213.0	66.0		
	11800	BERN	47	GB	1413.5	1415.8	7.0D	2817.0			
	8400	BERN	47	GB	1413.5	1415.9	7.0	1187.0			
	33	UPIC	46	C	1413.8	1416.1	6.4				
	19600	BERN	47	GB	1414.0	1416.0	7.0D	2196.0			
	2650	DWIN	45	C	1414.0	1417.0	15.0	180.0	90.0		
	410	SGMR	49	GB	1415.0	1415.8	16.6	219.0			QL=6 ST=2 TYP=7
	930	BORD	3	S	1415.0	1416.0	22.0	166.0	45.0		
	610	SGMR	49	GB	1415.3	1415.6	13.7	430.0			QL=6 ST=2 TYP=7
	245	SGMR	49	GB	1415.3	1415.8	16.7	7600.0			QL=6 ST=2 TYP=7
	1415	SGMR	49	GB	1415.3	1415.8	15.8	200.0			QL=6 ST=2 TYP=7
	127	TORN	47	GB	1415.5		4.4	1300.0			DISTURBED
	35000	BERN	47	GB	1415.5	1415.9	7.0D	3843.0			
	9400	HUAN	29	PBI	1421.1	1421.1	26.7	80.5	33.7		R
	2800	OTTA	30	PBI	1422.0	1422.0	35.0	25.0	8.0		
	2800	OTTA	21	GRF	1444.0	1447.0	14.0	7.8	3.7		
	2800	OTTA	1	S	1444.5	1445.0	1.5	5.2	2.6		
	930	BORD	8	S	1444.8	1444.8	.2	52.0	2.0		
	2800	OTTA	4	S/F	1509.0	1513.8	10.0	475.0	155.0		
	1415	ATHN	47	GB	1509.3	1512.5	9.5	210.0			QL=2 ST=2 TYP=5
	2695	ATHN	49	GB	1509.3	1513.3	18.5	510.0			QL=6 ST=2 TYP=6
	930	BORD	45	C	1509.4	1513.2	18.0	302.0	30.0		
	410	SGMR	49	GB	1509.6	1512.0	16.2	100.0			QL=6 ST=2 TYP=7
	610	SGMR	49	GB	1509.6	1512.0	19.2	280.0			QL=6 ST=2 TYP=7
	8800	ATHN	49	GB	1509.6	1512.5	34.2	2199.0			QL=2 ST=2 TYP=6
	4995	ATHN	49	GB	1509.6	1512.6	19.2	1100.0			QL=2 ST=2 TYP=6
	245	SGMR	49	GB	1509.8	1510.0	8.3	130.0			QL=6 ST=2 TYP=7
	1415	SGMR	49	GB	1510.0	1511.8	7.8	330.0			QL=6 ST=2 TYP=7
	2650	DWIN	47	GB	1510.0	1519.0	15.0	510.0	200.0		
	2695	SGMR	49	GB	1510.1	1511.5	14.9	400.0			QL=6 ST=2 TYP=7
	9400	HUAN	3	S	1510.2	1515.8	9.0	182.4	82.5		R
	4995	SGMR	49	GB	1510.3	1512.0	8.0	900.0			QL=6 ST=2 TYP=7
	19600	BERN	47	GB	1510.3	1512.5	40.0	1751.0			
	35000	BERN	47	GB	1510.3	1512.5	40.0U	1494.0			
	8400	BERN	47	GB	1510.3	1512.6U	40.0	2360.0D			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
15	11800	BERN	47	GB	1510.3	1512.6	40.0	2401.0			
	33	UPIC	48	C	1510.4		15.5				
	8800	SGMR	49	GB	1510.8	1512.0	6.0	1000.0			QL=6 ST=2 TYP=7
	15400	SGMR	49	GB	1510.8	1512.0	14.0	2000.0			QL=6 ST=2 TYP=7
	2800	OTTA	30	PBI	1519.0	1519.0	15.0	20.8	10.4		
	9400	HUAN	29	PBI	1519.2	1519.2	26.6	48.3	20.8		0
	2800	OTTA	3	S	1521.2	1523.0	6.0	14.0	6.8		
	9400	HUAN	20	GRF	1655.1	1705.0	14.3	7.2	3.1		0
	9400	HUAN	20	GRF	1729.2	1746.0	38.4	6.2	3.4		0
	2800	OTTA	21	GRF	1835.0	1843.5	19.0	5.2	2.0		
	2800	OTTA	8	S	1835.2	1835.5	.8	4.8	1.6		
	930	BORD	46	C	1837.0	1839.6	7.3	250.0	10.0		
	2800	OTTA	4	S/F	1839.0	1840.5	3.0	26.0	8.6		
	9400	HUAN	22	GRF	1839.1	1848.2	25.6	9.8	7.9		R
	610	SGMR	8	S	1839.5	1840.5	1.0D	41.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	1839.8	1840.6	1.0	29.0			QL=6 ST=2 TYP=3
	4995	SGMR	8	S	1840.1	1840.3	.2	19.0			QL=6 ST=2 TYP=3
	2695	PALE	8	S	1840.3	1840.5	.3	27.0			QL=6 ST=2 TYP=3
	610	PALE	8	S	1840.3	1840.6	.3	32.0			QL=6 ST=2 TYP=3
	410	SGMR	8	S	1840.5	1840.6	.1	17.0			QL=6 ST=2 TYP=3
	2800	OTTA	260	FAL	1855.0	1905.0	10.0	-5.4	-2.7		
	9400	HUAN	1	S	1923.2	1925.0	5.3	5.4	3.0		0
	9400	HUAN	20	GRF	2019.3	2032.4	31.6	10.7	3.8		0
	8800	SGMR	4	S/F	2028.8	2031.1	3.3	20.0			QL=6 ST=2 TYP=3
	15400	SGMR	8	S	2029.0	2029.3	.3	29.0			QL=6 ST=2 TYP=3
	9400	HUAN	46	C	2057.0	2100.7	10.0	87.6	56.7		R
	9400	HUAN			2057.0	2101.6		86.7			R
	2800	OTTA	20	GRF	2057.0	2102.0	50.0	4.2	2.3		
	8800	SGMR	47	GB	2057.3	2101.5	19.5	87.0			QL=6 ST=2 TYP=5
	4995	SGMR	20	GRF	2057.6	2101.0	12.5	33.0			QL=6 ST=2 TYP=2
	8800	PALE	47	GB	2057.6	2101.6	17.5	100.0			QL=6 ST=2 TYP=5
	4995	PALE	20	GRF	2057.8	2101.3	6.8	27.0			QL=6 ST=2 TYP=2
	15400	SGMR	47	GB	2057.8	2101.6	12.3	77.0			QL=6 ST=2 TYP=5
	15400	PALE	47	GB	2057.8	2101.6	17.3	98.0			QL=6 ST=2 TYP=5
	3750	TYKW	20	GRF	2059.0E	2059.0U	50.0D	6.0D	3.0D		
	9400	TYKW	45	C	2059.0E	2100.9	21.0D	95.0	45.0D		
	9400	HUAN	29	PBI	2107.0	2107.0	39.2	35.8	11.8		R
	9400	TYKW	29	PBI	2120.0		50.0	22.0	9.0		
	2000	TYKW	20	GRF	2120.0	2210.0	140.0	4.0	2.0		
	3750	TYKW	20	GRF	2220.0	2248.0	80.0	6.0	2.5		
	9400	TYKW	28	PRE	2224.0	2241.0	17.0	4.0	2.0		
	9400	TYKW	45	C	2241.0	2247.7	12.0	18.0	8.0		
	9400	TYKW	29	PBI	2253.0		40.0	6.0	3.0		
	3750	TYKW	20	GRF	2346.0	2353.0	45.0	2.0	1.0		
	9400	TYKW	5	S	2349.0	2353.0	20.0	6.0	2.5		
16	260	ONDR	44	NS	0540.0E	1208.0U	502.0D	42.0			
	33	UPIC	43	NS	0545.0		659.0				
	204	IZMI	44	NS	0600.0E		360.0D	40.0			
	127	TORN	43	NS	0627.0	0849.4	443.0	140.0	3.0		V1
	200	GORK	44	NS	0700.0E		203.0D		35.0		
	100	GORK	44	NS	0703.0E		186.0D		10.0		
	245	PALE	43	NS	1629.0	0325.5	737.0D	380.0			QL=6 ST=2 TYP=1
	410	PALE	43	NS	1629.0	2330.8	737.0D	54.0			QL=6 ST=2 TYP=1
	200	HIRA	44	NS	1917.0E	0656.0	875.0D	80.0	40.0		ML
	100	HIRA	44	NS	1917.0E	0748.0	875.0D	1000.0	190.0		ML
	208	VORO	44	NS	2100.0E		360.0D		18.0		
	1000	TYKW	5	S	0011.0	0011.8	2.0	6.0	1.0		
	3750	TYKW	5	S	0035.0	0035.2	1.5	6.0	2.0		
	9400	TYKW	5	S	0035.0	0035.1	1.0	11.0	2.0		
	2695	PENT	1	S	0042.0	0042.5	1.0	6.2			
	100	HIRA	8	S	0042.5	0042.7	.4	7200.0			WL
	9400	TYKW	28	PRE	0056.0	0206.0	70.0	10.0	5.0		
	3750	TYKW	28	PRE	0100.0	0209.0	69.0	6.0	3.0		
	9400	TYKW	5	S	0105.5	0106.9	6.0	12.0	4.0		
	2000	TYKW	28	PRE	0125.0	0211.0	46.0	4.0	2.0		INTERFERENCE
	1000	TYKW			0135.0	0147.4		15.0			
	1000	TYKW	45	C	0135.0	0212.9	45.0	38.0	4.0D		
	410	LEAR	8	S	0135.6	0135.8	.5	18.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0139.0	0139.5	.8	42.0			QL=6 ST=2 TYP=3

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
16	410	LEAR	8	S	0139.0	0139.5	.8	18.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0148.5	0148.6	.6	13.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0151.8	0151.8	.2	26.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0152.5	0152.6	.6	19.0			QL=6 ST=2 TYP=3
	17000	NOBE	28	PRE	0156.1	0158.3	11.7	28.0			R
	9400	TYKW	45	C	0157.0	0158.2	4.0	30.0	7.0		
	3750	TYKW	5	S	0158.0	0158.3	1.0	12.0	3.0		
	4995	PALE	8	S	0158.1	0158.1	.2	18.0			QL=6 ST=2 TYP=3
	8800	PALE	8	S	0158.1	0158.1	.2	32.0			QL=6 ST=2 TYP=3
	15400	LEAR	8	S	0158.1	0158.1	1.2	30.0			QL=6 ST=2 TYP=3
	4995	LEAR	8	S	0158.1	0158.3	1.0	17.0			QL=6 ST=2 TYP=3
	8800	LEAR	8	S	0158.1	0158.3	1.2	30.0			QL=6 ST=2 TYP=3
	245	LEAR	47	GB	0203.5	0203.6	.1	139.0			QL=6 ST=3 TYP=5
	410	LEAR	47	GB	0203.6	0203.8	.4	169.0			QL=6 ST=2 TYP=5
	9400	TYKW	47	GB	0206.0	0212.1	84.0	720.0	100.0		
	8800	MANI	47	GB	0207.0	0212.4	20.0	865.2	288.4		
	8800	LEAR	49	GB	0207.3	0212.3	45.0	790.0			QL=6 ST=2 TYP=6
	15400	LEAR	49	GB	0207.6	0212.3	45.0	570.0			QL=6 ST=2 TYP=6
	8800	PALE	49	GB	0207.8	0212.3	21.7	900.0			QL=6 ST=2 TYP=6
	17000	NOBE	45	C	0207.8	0212.3	21.3	474.0			R
	15400	PALE	49	GB	0208.1	0212.3	21.4	670.0			QL=6 ST=2 TYP=6
	4995	MANI	47	GB	0208.2	0212.2	18.8	720.0	240.0		
	4995	PALE	49	GB	0208.3	0212.1	21.2	610.0			QL=6 ST=2 TYP=6
	4995	LEAR	49	GB	0208.8	0212.1	43.5	510.0			QL=6 ST=2 TYP=6
	3750	TYKW	45	C	0209.0	0212.4	35.0	320.0	75.0		
	2695	MANI	3	S	0209.8	0212.4	9.2	129.6	43.2		
	2930	VORO	3	S	0210.0	0212.0	10.0	175.0			
	35000	NAGO	20	GRF	0210.0	0219.0	120.0	700.0			
	2000	TYKW	45	C	0211.0	0212.5	9.0	64.0	32.0		
	2695	LEAR	47	GB	0211.1	0212.3	37.2	119.0			QL=6 ST=2 TYP=5
	2695	PALE	47	GB	0211.3	0212.1	18.2	100.0			QL=6 ST=2 TYP=5
	1415	LEAR	4	S/F	0211.8	0212.5	20.7	20.0			QL=6 ST=2 TYP=3
	1415	MANI	3	S	0211.8	0212.7	3.2	15.0	5.0		
	1415	PALE	8	S	0212.0	0212.8	1.0	18.0			QL=6 ST=2 TYP=3
	2000	TYKW	30	PBI	0220.0		190.0	21.0	10.0		
	1000	TYKW	29	PBI	0220.0		150.0	5.0	2.5		
	17000	NOBE	29	PBI	0229.1	0229.1	65.0	84.0			R
	15400	PALE	47	GB	0229.5	0230.6	8.3	86.0			QL=6 ST=2 TYP=5
	2695	PALE	20	GRF	0229.5	0232.3	6.6	36.0			QL=6 ST=2 TYP=2
	4995	PALE	47	GB	0229.5	0232.3	6.6	100.0			QL=6 ST=2 TYP=5
	8800	PALE	47	GB	0229.5	0232.3	6.6	139.0			QL=6 ST=2 TYP=5
	245	LEAR	47	GB	0243.5	0243.6	.1	139.0			QL=6 ST=2 TYP=5
	3750	TYKW	30	PBI	0244.0		160.0	46.0	16.0		
	3750	TYKW	20	GRF	0250.0	0259.0	30.0	6.0	3.0D		
	15400	PALE	47	GB	0258.6	0259.0	2.5	87.0			QL=6 ST=2 TYP=5
	8800	PALE	47	GB	0258.8	0259.1	2.3	71.0			QL=6 ST=2 TYP=5
	2695	PALE	8	S	0300.5	0301.0	.5	30.0			QL=6 ST=2 TYP=3
	9100	GORK	20	GRF	0321.0E		68.0D				
	9400	TYKW	29	PBI	0330.0		75.0	34.0	15.0		
	2950	GORK	21	GRF	0338.0	0548.5	130.5U	18.0			
	3750	TYKW	5	S	0500.0	0503.7	5.0	9.0	4.0		
	2000	TYKW	5	S	0502.0	0503.6	4.0	6.0	3.0		
	2695	LEAR	4	S/F	0502.0	0503.8	2.8	11.0			QL=6 ST=2 TYP=3
	2950	GORK	1	S	0503.2	0503.7	1.3	3.8			
	3750	TYKW	29	PBI	0505.0		15.0	3.0	1.5		
	2000	TYKW	29	PBI	0506.0		15.0	2.0	1.0		
	950	GORK	4	S/F	0533.0	0534.3	1.5	81.0			
	650	GORK	4	S/F	0533.6	0534.4U	1.1	60.0D			
	15400	LEAR	8	S	0619.8	0620.3	1.2	18.0			QL=6 ST=2 TYP=3
	1000	TYKW	21	GRF	0625.0	0730.0	130.0	4.0	1.5		
	536	ONDR	8	S	0628.2	0628.2	.2	9.0			
	2950	GORK	21	GRF	0636.0	0748.0	231.0	12.8			
	536	ONDR	8	S	0636.3	0636.3	.2	7.0			
	2000	TYKW	28	PRE	0638.0	0649.0	25.0	5.0	2.0		
	3750	TYKW	28	PRE	0640.0	0649.0	30.0	6.0	4.0		
	100	HIRA	46	C	0640.0	0641.0	3.0	320.0	126.0		WL
	2000	TYKW	5	S	0703.0	0728.0	37.0	10.0	5.5		
	100	HIRA	41	F	0705.3	0707.8	2.8	900.0			WL
	1000	TYKW	45	C	0706.0	0707.0	3.5	63.0	4.0		
	930	BORD	41	F	0706.0	0707.0	2.2	146.0	3.0		

SOLAR RADIO EMISSION
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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
16	6100	KISV	1	S	0709.7	0710.1	1.5	5.0			
	3750	TYKW	45	C	0710.0	0740.0U	40.0	27.0U	12.0		INTERFERENCE
	6100	KISV	22	GRF	0712.0	0726.0	70.0U	16.0			
	6100	KISV			0712.0	0741.0		17.0			
	9400	TYKW	45	C	0722.0	0739.2U	25.0U	24.0U	7.0U		INTERFERENCE
	15000	KISV	21	GRF	0724.0	0727.0	6.0	23.0			
	4995	ATHN	20	GRF	0724.5	0725.8	4.6	21.0			QL=6 ST=2 TYP=2
	4995	LEAR	4	S/F	0724.6	0725.8	6.0	31.0			QL=6 ST=2 TYP=3
	2695	LEAR	20	GRF	0724.6	0726.3	6.0	13.0			QL=6 ST=2 TYP=2
	15400	LEAR	4	S/F	0724.6	0727.0	3.0	19.0			QL=6 ST=2 TYP=3
	8800	LEAR	4	S/F	0724.8	0725.1	5.8	21.0			QL=6 ST=2 TYP=3
	2950	GORK	1	S	0725.8	0727.7	4.2	2.6			
	9100	GORK	20	GRF	0728.0	0741.0	159.0	20.0			
	1000	TYKW	45	C	0735.0	0736.8	4.0	160.0	14.0		
	2000	TYKW	29	PBI	0740.0		80.0D	6.0	5.0D		
	9400	TYKW	29	PBI	0747.0U		75.0D	12.0U	9.0D		
	3750	TYKW	29	PBI	0750.0		90.0D	14.0U	9.0D		
	100	HIRA	42	SER	0834.0	0838.0	25.0	670.0			ML
	650	GORK	22	GRF	0846.3	0849.4	13.6	4.0			
	950	GORK	2	S/F	0848.0	0849.0	11.0	8.0			
	950	GORK	2	S/F	0855.0	0858.8	4.7	9.0			
	930	BORD	41	F	0856.0	0859.0	4.0	25.0	2.0		
	1000	TYKW	45	C	0856.5	0858.2	3.5D	14.0	3.0D		
	808	ONDR	41	F	0905.9	0906.8	3.2	61.0	26.0		
	930	BORD	46	C	0930.0	0930.0	.4	18.0	3.0		
	15000	KISV	2	S/F	0944.3	0944.9	2.0	13.0			
	2695	ATHN	4	S/F	1036.5	1039.1	8.5	30.0			QL=6 ST=2 TYP=3
	8800	ATHN	47	GB	1036.6	1039.1	6.5	150.0			QL=6 ST=2 TYP=5
	4995	ATHN	47	GB	1036.6	1039.5	8.0	100.0			QL=6 ST=2 TYP=5
	9100	GORK	20	GRF	1041.1	1044.3	32.0	14.0			
	6100	KISV	21	GRF	1041.2	1044.7	25.0	5.0			
	9100	GORK	3	S	1131.6	1132.3	1.2	46.0			
	6100	KISV	1	S	1131.8	1132.3	2.0	8.0			
	15000	KISV	1	S	1131.8	1132.3	1.5	34.0			
	8800	SGMR	8	S	1132.0	1132.3	.5	44.0			QL=6 ST=2 TYP=3
	15400	SGMR	8	S	1132.1	1132.1	.2	29.0			QL=6 ST=2 TYP=3
	9100	GORK	29	PBI	1132.8	1133.0	27.0	17.0			
	6100	KISV	20	GRF	1139.7	1142.5	7.0	7.0			
	536	ONDR	8	S	1155.4	1155.4	.1	20.0			
	6100	KISV	40	F	1200.4	1202.2	4.5	5.0			
	930	BORD	41	F	1217.2	1217.3	.2	74.0	2.0		
	2800	OTTA	20	GRF	1315.0	1330.0	20.0	4.0	1.7		
	9400	HUAN	20	GRF	1318.5	1440.4	81.9U	7.4	5.2		0
	9400	HUAN	1	S	1441.5	1444.0	5.0	5.5	2.6		0
	930	BORD	8	S	1548.0	1548.2	.2	41.0	1.0		
	2800	OTTA	21	GRF	1615.0	1640.0	70.0	11.0	5.5		
	1415	PALE	8	S	1636.6	1636.8	.2	11.0			QL=6 ST=2 TYP=3
	9400	HUAN	4	S/F	1637.0	1640.5	6.6	165.9	76.8		R
	2650	DWIN	2	S/F	1637.0	1641.0	7.0	35.0	10.0		
	9400	HUAN			1637.0	1641.4		180.7			
	4995	SGMR	47	GB	1637.1	1640.1	11.2	91.0			QL=6 ST=2 TYP=5
	8800	SGMR	47	GB	1637.5	1640.1	10.3	160.0			QL=6 ST=2 TYP=5
	8400	BERN	45	C	1637.5	1641.3	13.0D	231.0			
	11800	BERN	45	C	1637.5	1641.3	13.0D	161.0			
	245	SGMR	47	GB	1637.6	1638.1	1.5	200.0			QL=6 ST=2 TYP=5
	2695	SGMR	4	S/F	1637.6	1640.1	6.5	34.0			QL=6 ST=2 TYP=3
	2800	OTTA	46F	C	1637.7	1641.2	9.0	36.0	13.2		
	245	PALE	47	GB	1638.1	1638.8	1.0	390.0			QL=6 ST=2 TYP=5
	4995	PALE	47	GB	1638.1	1640.1	5.2	100.0			QL=6 ST=2 TYP=5
	2695	PALE	4	S/F	1638.8	1640.0	3.2	28.0			QL=6 ST=2 TYP=3
	8800	PALE	47	GB	1639.3	1640.1	3.5	400.0			QL=6 ST=2 TYP=5
	15400	SGMR	47	GB	1639.6	1640.1	2.9	64.0			QL=6 ST=2 TYP=5
	15400	PALE	8	S	1639.8	1639.8	1.5	46.0			QL=6 ST=2 TYP=3
	610	SGMR	47	GB	1640.0	1640.8	1.8	89.0			QL=6 ST=2 TYP=5
	610	PALE	47	GB	1640.1	1640.8	1.2	84.0			QL=6 ST=2 TYP=5
	1415	SGMR	8	S	1640.1	1641.1	2.0	26.0			QL=6 ST=2 TYP=3
	930	BORD	46	C	1640.8	1640.9	4.0	59.0	4.0		
	9400	HUAN	29	PBI	1643.6	1643.6	23.1	27.6	11.6		R
	930	BORD	41	F	1716.4	1716.4	.3	33.0	2.0		
	9400	HUAN	20	GRF	1724.5	1731.0	18.0	5.5	2.8		0

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
16	2650	DWIN	2	S/F	1734.0	1736.0	15.0	30.0	20.0		
	9400	HUAN	21	GRF	1901.5	1927.6	37.0	14.8	5.2		0
	8800	PALE	47	GB	1919.3	1919.5	2.8	90.0			QL=6 ST=2 TYP=5
	2800	OTTA	20	GRF	1925.0	1930.0	20.0	2.6	1.3		
	8800	PALE	47	GB	1926.1	1926.3	.4	66.0			QL=6 ST=2 TYP=5
	8800	PALE	8	S	1933.3	1935.3	2.0D	46.0			QL=6 ST=2 TYP=3
	9400	HUAN	22	GRF	1944.1	2049.5	133.4	42.4	14.5		0
	9400	HUAN	3	S	1950.3	1951.4	4.5	20.3	14.8		0
	4995	PALE	8	S	1950.5	1951.6	2.0	27.0			QL=6 ST=2 TYP=3
	8800	PALE	8	S	1951.1	1951.8	1.0	30.0			QL=6 ST=2 TYP=3
	15400	PALE	8	S	1951.3	1951.8	.8	34.0			QL=6 ST=2 TYP=3
	2800	OTTA	21	GRF	2027.0		70.0	10.2			
	2800	OTTA	40	F	2031.0	2038.1	25.0	46.0			
	610	SGMR	8	S	2031.1	2031.3	1.5	49.0			QL=6 ST=2 TYP=3
	1415	SGMR	4	S/F	2031.1	2032.1	2.7	33.0			QL=6 ST=2 TYP=3
	2695	SGMR	4	S/F	2031.1	2033.1	3.2	28.0			QL=6 ST=2 TYP=3
	610	PALE	8	S	2031.3	2031.5	.5	50.0			QL=6 ST=2 TYP=3
	4995	PALE	47	GB	2031.3	2032.1	22.3	24.0			QL=6 ST=2 TYP=5
	4995	SGMR	4	S/F	2031.3	2032.3	2.5	18.0			QL=6 ST=2 TYP=3
	1415	PALE	8	S	2032.1	2032.3	.2	20.0			QL=6 ST=2 TYP=3
	2695	PALE	8	S	2032.1	2032.3	1.0	21.0			QL=6 ST=2 TYP=3
	8800	PALE	47	GB	2032.1	2032.3	21.5	50.0			QL=6 ST=2 TYP=5
	4995	SGMR	47	GB	2034.1	2036.1	6.2	110.0			QL=6 ST=2 TYP=5
	8800	SGMR	47	GB	2034.1	2036.1	6.0	119.0			QL=6 ST=2 TYP=5
	2695	SGMR	47	GB	2034.5	2036.6	6.1	42.0			QL=6 ST=2 TYP=5
	1415	SGMR	4	S/F	2034.6	2035.6	5.0	20.0			QL=6 ST=2 TYP=3
	9400	HUAN	45	C	2034.8	2036.3	9.7	182.5	44.9		L
	100	HIRA	46	C	2034.8	2036.6	3.7	5000.0	870.0		WL
	200	HIRA	46	C	2035.0	2036.2	6.0	670.0	125.0		0
	245	SGMR	47	GB	2035.1	2035.6	19.5	460.0			QL=6 ST=2 TYP=5
	410	SGMR	47	GB	2035.1	2036.8	19.5	60.0			QL=6 ST=2 TYP=5
	610	SGMR	4	S/F	2035.1	2037.0	3.0	11.0			QL=6 ST=2 TYP=3
	245	PALE	49	GB	2035.3	2035.6	2.0	640.0			QL=6 ST=2 TYP=6
	410	PALE	47	GB	2035.3	2036.8	2.0	66.0			QL=6 ST=2 TYP=5
	15400	PALE	47	GB	2035.6	2036.1	18.0	100.0			QL=6 ST=2 TYP=5
	100	HIRA	48	C	2042.0	2042.6	15.3	10000.0	1280.0		WL
	100	HIRA			2042.0	2055.3		530.0			WL
	3750	TYKW	21	GRF	2059.0E	2059.0U	100.0D	20.0D	10.0D		
	9400	TYKW	21	GRF	2059.0E	2059.0U	95.0D	40.0D	18.0D		
	9400	HUAN	2	S/F	2102.2	2104.0	3.4	7.4	3.7		0
	3750	TYKW	5	S	2109.0U	2111.0U	5.0U	6.0U	2.0U		INTERFERENCE
	245	PALE	49	GB	2116.5	2116.6	1.1	580.0			QL=6 ST=2 TYP=6
	9400	HUAN	1	S	2117.6	2121.0	6.6	16.6	6.7		0
	9400	TYKW	5	S	2118.0	2120.0	25.0	16.0	5.0U		
	3750	TYKW	20	GRF	2120.0	2123.5U	30.0	6.0U	2.0		
	100	HIRA	8	S	2127.7	2127.9	.5	530.0			ML
	9400	TYKW	5	S	2256.0	2258.1	8.0	8.0	2.0		
	200	HIRA	46	C	2303.0	2303.2	2.5	475.0	114.0		ML
	9400	TYKW	28	PRE	2308.0	2314.0	10.0	7.0	5.0		
	3750	TYKW	28	PRE	2312.0	2333.3	21.3U	8.0	3.0		
	9400	TYKW	5	S	2318.0	2319.5	5.0	29.0	20.0		
	17000	NOBE	21	GRF	2318.4	2319.8	45.0	24.0			R
	9400	TYKW	30	PBI	2323.0		9.0	14.0	12.0		
	2695	PENT	21	GRF	2325.0	2350.0	100.0	12.0	5.4		
	9400	TYKW	45	C	2332.0	2333.5	25.0	159.0	33.0		
	4995	LEAR	47	GB	2332.6	2333.6	10.2	68.0			QL=5 ST=2 TYP=5
	8800	LEAR	47	GB	2332.8	2333.5	9.8	150.0			QL=5 ST=2 TYP=5
	15400	LEAR	47	GB	2332.8	2333.5	14.7	150.0			QL=5 ST=2 TYP=5
	8800	PALE	47	GB	2332.8	2333.5	18.0	200.0			QL=6 ST=2 TYP=5
	3750	TYKW	45	C	2333.0	2333.6	20.0	40.0	25.0		
	15400	PALE	47	GB	2333.3	2333.5	6.3	189.0			QL=6 ST=2 TYP=5
	4995	PALE	47	GB	2333.3	2333.6	12.3	71.0			QL=6 ST=2 TYP=5
	4995	MANI	3	S	2333.3	2333.8	1.7	65.0	21.7		
	8800	MANI	3	S	2333.3	2333.8	2.5	192.5	64.2		
	17000	NOBE	1	S	2333.4	2333.5	6.0	125.0			R
	2000	TYKW	5	S	2335.0	2351.0	25.0	7.0	3.0		
	1000	TYKW	5	S	2342.0	2349.4	25.0	2.0	.7		
	3750	TYKW	30	PBI	2353.0		75.0	18.0	7.0		
	9400	TYKW	30	PBI	2357.0		70.0	12.0	6.0		
17	200	GORK	44	NS	0303.0E		537.0D		60.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
17	100	GORK	44	NS	0303.0E		537.0D		60.0		
	33	UPIC	43	NS	0422.5		847.5D				
	204	IZMI	44	NS	0600.0E		360.0D	100.0			
	260	ONDR	44	NS	0603.0E	1052.0U	491.0D				
	127	TORN	44	NS	0910.0E		390.0D		114.0		VO
	245	SGMR	43	NS	0928.0	1315.3	871.0D	210.0			QL=6 ST=2 TYP=1
	245	PALE	43	NS	1628.0	1747.5	654.0D	160.0			QL=6 ST=2 TYP=1
	100	HIRA	44	NS	1918.0E	1956.0	875.0D	600.0	200.0		ML
	200	HIRA	44	NS	1918.0E	2009.0	875.0D	70.0	30.0		ML
	208	VORO	44	NS	2100.0E		360.0D		28.0		
	245	LEAR	43	NS	2320.0	0740.0	619.0D	210.0			QL=6 ST=2 TYP=1
	2000	TYKW	30	PBI	0000.0		70.0	3.0	1.5		
	100	HIRA	46	C	0002.5	0004.7	3.4	550.0	286.0		ML
	200	HIRA	46	C	0002.8	0003.1	.8	280.0	27.0		ML
	1000	TYKW	45	C	0016.5	0020.3	4.5	4.0	.5		
	3750	TYKW	5	S	0031.0	0032.6	25.0	5.0	2.0		
	9400	TYKW	45	C	0031.0	0042.4	17.0	11.0	3.0		
	1000	TYKW	45	C	0040.0	0040.2	5.0	7.0	1.5		
	3750	TYKW	45	C	0041.0	0042.6	10.0	5.0	1.5		
	610	LEAR	8	S	0041.6	0042.0	1.7	17.0			QL=6 ST=2 TYP=3
	200	HIRA	46	C	0041.6	0042.2	1.1	137.0	115.0		O
	410	LEAR	47	GB	0041.6	0042.3	2.2	100.0			QL=6 ST=2 TYP=5
	245	LEAR	8	S	0041.8	0042.3	1.0	47.0			QL=6 ST=2 TYP=3
	2000	TYKW	45	C	0042.0	0042.6	1.5	9.0	2.0		
	100	HIRA	42	SER	0101.2	0107.6	10.7	630.0			ML
	3750	TYKW	21	GRF	0130.0	0230.0	160.0	4.0	2.0		
	9400	TYKW	45	C	0148.0	0152.0	15.0	7.0	2.0		
	200	HIRA	46	C	0210.8	0222.5	21.0	104.0	30.0		WL
	9400	TYKW	28	PRE	0213.0	0227.0	27.0	9.0	3.0		
	1000	TYKW	45	C	0229.9	0230.2	1.0	8.0	1.5		
	9400	TYKW	45	C	0240.0	0245.9	30.0	325.0	55.0		
	1415	MANI	40	F	0240.0	0245.4	12.0	222.7	74.2		
	9395	PEKG	45	C	0240.0	0245.8	10.0	300.0	78.2		
	8800	MANI	4	S/F	0240.5	0246.0	12.5	365.7	121.9		
	17000	NOBE	7	C	0241.1	0245.9	7.8	220.0			R
	15400	LEAR	47	GB	0241.6	0242.3	24.5	189.0			QL=6 ST=2 TYP=5
	8800	LEAR	47	GB	0241.6	0242.6	24.5	189.0			QL=6 ST=2 TYP=5
	15400	PALE	47	GB	0241.8	0242.3	8.7	200.0			QL=6 ST=2 TYP=5
	8800	PALE	47	GB	0241.8	0242.5	10.3	200.0			QL=6 ST=2 TYP=5
	4995	LEAR	47	GB	0241.8	0242.6	24.3	85.0			QL=6 ST=2 TYP=5
	4995	MANI	4	S/F	0241.8	0245.7	11.2	145.2	48.4		
	3750	TYKW	45	C	0242.0	0244.9	28.0	62.0	22.0		
	2000	TYKW	5	S	0242.0	0245.0	20.0	1.5	.7		
	2840	PEKG	3	S	0242.0	0242.6	1.0	20.5	4.1		
	35000	NAGO	20	GRF	0242.0	0246.0	58.0	33.0			
	2840	PEKG	21	GRF	0242.0	0246.4	30.0	13.7	8.8		
	4995	PALE	47	GB	0242.1	0242.5	14.0	83.0			QL=6 ST=2 TYP=5
	2695	LEAR	8	S	0242.1	0242.6	1.0	11.0			QL=6 ST=2 TYP=3
	245	LEAR	47	GB	0242.6	0242.8	.5	390.0			QL=6 ST=2 TYP=5
	17000	NOBE	29	PBI	0248.9	0248.9	48.0	35.0			R
	9395	PEKG	30	PBI	0250.0		27.0	49.7	19.0		
	9395	PEKG	3	S	0305.0	0305.4	1.0	11.6	6.2		
	1000	TYKW	47	GB	0309.0	0309.5	1.0	15000.0	3500.0		
	2000	TYKW	5	S	0309.2	0309.4	.8	224.0	45.0		
	3750	TYKW	29	PBI	0310.0		50.0	10.0	4.0		
	9400	TYKW	30	PBI	0310.0		50.0	10.0	4.0		
	1000	TYKW			0311.6	0314.7		22400.0			
	1000	TYKW	47	GB	0311.6	0322.6	12.0	24700.0	3150.0		
	2000	TYKW	45	C	0312.0	0315.0	11.5	287.0	30.0		
	9400	TYKW	5	S	0312.0	0315.1	7.0	20.0	4.0		
	245	LEAR	47	GB	0313.3	0314.1	2.5	380.0			QL=6 ST=2 TYP=5
	8800	LEAR	4	S/F	0313.5	0315.1	4.6	22.0			QL=6 ST=2 TYP=3
	245	LEAR	47	GB	0314.3	0314.6	.5	300.0			QL=6 ST=2 TYP=5
	15400	LEAR	4	S/F	0314.6	0315.1	2.4	11.0			QL=6 ST=2 TYP=3
	650	GORK	23	GRF	0333.0E	1058.5	509.0D	29.0			
	245	PALE	49	GB	0347.1	0347.6	1.4	600.0			QL=6 ST=2 TYP=6
	2000	TYKW	5	S	0411.0	0414.0	7.0	1.5	.5		
	9400	TYKW	45	C	0416.0	0423.0	10.0	11.0	7.0		
	3750	TYKW	21	GRF	0416.0	0530.0	270.0	7.0	3.0		
	9400	TYKW	21	GRF	0416.0	0623.0	280.0	6.0	3.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
17	9100	GORK	20	GRF	0416.5	0424.2	9.2	14.0			
	3750	TYKW	45	C	0417.0	0424.2	13.0	9.0	6.0		
	2950	GORK	20	GRF	0417.6	0424.7	25.5	3.7			
	1000	TYKW	45	C	0422.0	0424.3	3.0	14.0	3.0		
	950	GORK	2	S/F	0422.6	0424.3	9.0	10.0			
	650	GORK	2	S/F	0422.8	0423.6	1.1	105.0	3.0		
	9400	TYKW	29	PBI	0426.0		40.0	6.0	3.0		
	3750	TYKW	29	PBI	0430.0		15.0	5.0	2.0		
	2000	TYKW	20	GRF	0500.0	0530.0	100.0	2.0	1.0		
	1000	TYKW	20	GRF	0505.0	0530.0	100.0	2.0	1.0		
	950	GORK	1	S	0508.0	0512.4	5.8	2.0			
	650	GORK	1	S	0512.1	0512.3	.8	3.6	1.5		
	9400	TYKW	20	GRF	0520.0	0530.0U	40.0	6.0U	3.0U		INTERFERENCE
	9400	TYKW	21	GRF	0635.0	0649.0	65.0	9.0	3.0		
	8800	LEAR	4	S/F	0645.0	0649.8	6.1	17.0			QL=6 ST=2 TYP=3
	930	BORD	41	F	0653.0	0653.2	.3	16.0	2.0		
	9100	GORK	1	S	0704.2	0707.6	6.9	15.0			
	9400	TYKW	5	S	0704.5	0707.5	16.0	14.0	5.0		
	6100	KISV	20	GRF	0704.6	0708.2	9.0	5.0			
	15000	KISV	20	GRF	0704.8	0708.4	8.0	18.0			
	3750	TYKW	5	S	0705.0	0708.0	8.0	3.0	1.5		
	650	GORK	4	S/F	0705.7	0706.6U	1.4	150.0D			
	950	GORK	4	S/F	0705.8	0706.4	1.5	83.0			
	8800	LEAR	4	S/F	0707.1	0707.5	2.9	18.0			QL=6 ST=2 TYP=3
	200	HIRA	8	S	0745.8	0745.9	.3	8300.0			WR
	9400	TYKW	20	GRF	0750.0	0810.0U	60.0	6.0U	3.0U		INTERFERENCE
	950	GORK	4	S/F	0802.8	0803.9	1.8	137.0			
	650	GORK	4	S/F	0803.0	0803.8	1.5	70.0D			
	950	GORK	4	S/F	0812.8	0831.1	18.3U	54.0			
	500	HIRA	45	C	0817.4	0818.0	1.0	10.0	6.0		0
	650	GORK	4	S/F	0817.4	0818.2	1.4	24.0			
	1000	TYKW	5	S	0817.5	0818.0	1.5	14.0	4.0		
	610	LEAR	8	S	0817.5	0818.1	.8	41.0			QL=6 ST=2 TYP=3
	930	BORD	46	C	0817.6	0818.2	1.0	17.0	4.0		
	950	GORK	2	S/F	0817.7	0818.2	1.2	8.0			
	9100	GORK	20	GRF	0818.0	0818.9	11.6	12.0			
	808	ONDR	2	S/F	0828.3	0828.5	1.8	12.0	8.0		
	650	GORK	4	S/F	0918.0	0918.5	1.5	67.0			
	950	GORK	2	S/F	0918.1	0918.9	1.4	25.0			
	6100	KISV	20	GRF	0924.0	0940.0	45.0	10.0			
	9100	GORK	21	GRF	0925.0	1106.2	149.0	55.0			
	2950	GORK	21	GRF	0925.0	1112.0	121.0	8.9			
	2950	GORK	1	S	0925.3	0925.6	.9	2.5			
	930	BORD	41	F	0949.3	0949.4	.4	16.0	2.0		
	245	SGMR	8	S	1028.5	1028.8	.5	30.0			QL=6 ST=2 TYP=3
	4995	SGMR	47	GB	1029.1	1029.8	8.4	93.0			QL=6 ST=2 TYP=5
	9100	GORK	3	S	1029.2	1030.0	1.7	64.0			
	8400	BERN	47	GB	1029.2	1051.0U	56.0	2340.0D			
	11800	BERN	47	GB	1029.2	1051.0	56.0	3872.0			
	19600	BERN	47	GB	1029.2	1051.0	40.0	1191.0			
	8800	SGMR	47	GB	1029.3	1029.8	1.8	63.0			QL=6 ST=2 TYP=5
	6100	KISV	28	PRE	1029.3	1030.0	15.0	50.0			
	15000	KISV	28	PRE	1029.3	1030.0	18.0	48.0			
	2950	GORK	1	S	1029.3	1030.0	2.5	13.0			
	3100	CRIM	1	S	1029.5	1030.6	3.0	16.0	5.0		
	9100	GORK	1	S	1036.6	1036.9	.5	15.0			
	950	GORK	21	GRF	1037.8	1109.0	82.0D	10.0			
	4995	ATHN	49	GB	1047.0	1048.8	15.5	219.0			QL=6 ST=2 TYP=6
	2695	ATHN	49	GB	1047.1	1050.6	14.4	620.0			QL=6 ST=2 TYP=6
	8800	ATHN	49	GB	1047.8	1048.8	17.2	420.0			QL=6 ST=2 TYP=6
	8800	SGMR	49	GB	1047.8	1050.8	21.5	2100.0			QL=6 ST=2 TYP=7
	15000	KISV			1048.0	1049.2		525.0			
	6100	KISV			1048.0	1049.2		217.0			
	9100	GORK	47	GB	1048.0	1050.9	12.4	2500.0			
	2800	OTTA	4	S/F	1048.0	1051.0	12.0	435.0	-45.0		
	2650	DWIN	49	GB	1048.0	1051.0	15.0	570.0D			
	35000	BERN	47	GB	1048.0	1051.0	40.0U	709.0			
	15000	KISV	47	GB	1048.0	1051.1	6.0	2390.0			
	6100	KISV	47	GB	1048.0	1051.1	6.0	750.0U			
	15000	KISV			1048.0	1052.7		562.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
17	4995	SGMR	49	GB	1048.1	1051.0	21.9	920.0			QL=6 ST=2 TYP=7
	2950	GORK	45	C	1048.3	1049.2	2.9	70.0			
	2950	GORK			1048.3	1050.4		95.0			
	15400	SGMR	49	GB	1048.3	1050.8	17.8	1800.0			QL=6 ST=2 TYP=7
	2950	GORK			1048.3	1051.2		510.0			
	3100	CRIM	3	S	1048.5	1051.4	10.0	440.0	146.0		
	2695	SGMR	49	GB	1048.6	1050.8	8.5	500.0			QL=6 ST=2 TYP=7
	100	GORK	47	GB	1049.3	1050.5	2.3	13400.0			
	100	GORK			1049.3	1050.8		13400.0			
	1415	ATHN	47	GB	1049.8	1051.0	11.7	56.0			QL=6 ST=2 TYP=5
	200	GORK	4	S/F	1049.9	1051.2	5.2	540.0			
	650	GORK	4	S/F	1049.9	1051.2	8.6	62.0	20.0		
	204	IZMI	45	C	1050.0	1050.5	3.0	6900.0	1500.0		
	810	KRAK	45	C	1050.0	1051.6	15.3	100.0	14.0		
3	430	KRAK	45	C	1050.0	1052.6	15.8	280.0	30.0		
	3000	IZMI	7	C	1050.0	1052.8	6.0	636.0	240.0		
	930	BORD	46	C	1050.0	1105.0	15.0	90.0	23.0		
	1415	SGMR	49	GB	1050.1	1051.1	6.7	97.0			QL=6 ST=2 TYP=7
	950	GORK	4	S/F	1050.1	1051.1	12.2	71.0			
	245	SGMR	49	GB	1050.1	1051.3	16.0	2899.0			QL=6 ST=2 TYP=7
	610	SGMR	49	GB	1050.3	1051.1	11.7	169.0			QL=6 ST=2 TYP=7
	410	SGMR	49	GB	1050.3	1052.6	4.8	100.0			QL=6 ST=2 TYP=7
	808	ONDR	7	C	1050.8	1051.3	12.8	55.0	33.0		
3	6100	KISV	29	PBI	1054.0	1054.0	35.0	37.0			
	15000	KISV	29	PBI	1054.0	1054.0	15.0	112.0			
	3100	CRIM	29	PBI	1058.5	1058.5	22.0	18.0	6.0		
	2800	OTTA	29	PBI	1100.0	1100.0	25.0	32.6	16.3		
	15000	KISV	8	S	1129.8	1130.1U	1.0	41.0			
	6100	KISV	3	S	1129.8	1130.3U	1.5	10.0			
	9100	GORK	1	S	1129.9	1130.1	1.1	17.0			
	950	GORK	2	S/F	1134.5	1134.8	.5	13.0			
	536	ONDR	7	C	1150.7	1151.3	13.7	52.0	26.0		
3	2800	OTTA	1A	S	1203.0	1204.5	3.0	4.0	2.2		
	245	SGMR	47	GB	1203.3	1203.6	1.2	239.0			QL=6 ST=2 TYP=5
	650	GORK	4	S/F	1203.4	1203.8	2.0	47.0			
	610	SGMR	47	GB	1203.5	1203.6	.3	71.0			QL=6 ST=2 TYP=5
	930	BORD	41	F	1203.5	1203.7	2.0	48.0	3.0		
	810	KRAK	8	S	1203.6	1203.6	.2	75.0			
	2695	SGMR	8	S	1203.6	1203.6	.2	30.0			QL=6 ST=2 TYP=3
	430	KRAK	8	S	1203.6	1203.6	.2	140.0			
	2950	GORK	1	S	1203.6	1203.8	.7	13.0			
	950	GORK	45	C	1203.7	1203.8	2.3	27.0			
	2800	OTTA	8	S	1203.7	1203.8	.6	24.0			
	950	GORK			1203.7	1205.1		14.0			
3	2650	DWIN	1	S	1204.0	1204.0	1.0	70.0	30.0		
5	9400	HUAN	20	GRF	1221.1	1237.8	30.4	8.7	6.4		0
	930	BORD	41	F	1226.5	1226.8	1.2	88.0	2.0		
	127	TORN	47	GB	1228.9	1230.1	2.5	3700.0	1800.0		
	930	BORD	8	S	1231.8	1231.8	.2	30.0	1.0		
	8800	ATHN	47	GB	1306.3	1306.6	2.5	110.0			QL=6 ST=2 TYP=5
5	4995	ATHN	8	S	1306.5	1306.6	1.1	8.0			QL=6 ST=2 TYP=3
	9400	HUAN	3	S	1306.9	1307.7	2.3	119.6	30.3		0
	15400	SGMR	47	GB	1307.3	1307.6	.8	180.0			QL=6 ST=2 TYP=5
	8800	SGMR	47	GB	1307.5	1307.6	.5	91.0			QL=6 ST=2 TYP=5
	19600	BERN	3	S	1307.5	1307.7	3.0	109.0			
	11800	BERN	3	S	1307.5	1307.7	3.0	322.0			
	8400	BERN	3	S	1307.5	1307.8	3.0	94.0			
6	4995	SGMR	8	S	1307.6	1307.6	.2	20.0			QL=6 ST=2 TYP=3
6	9400	HUAN	2	S/F	1323.8	1326.3	4.4	8.7	5.8		0
6	2800	OTTA	21	GRF	1325.0	1407.0	70.0	5.0			
7	11800	BERN	3	S	1338.0	1339.0	7.0D	242.0			
	8400	BERN	3	S	1338.0	1339.0	7.0D	183.0			
	19600	BERN	3	S	1338.3	1339.0	5.0	49.0			
	8800	ATHN	47	GB	1338.3	1339.0	5.7	160.0			QL=6 ST=2 TYP=5
	9400	HUAN	3	S	1338.3	1339.2	4.0	164.7	65.4		R
	2800	OTTA	3	S	1338.5	1339.0	2.0	33.0	16.5		
	4995	ATHN	47	GB	1338.5	1339.0	6.1	200.0			QL=6 ST=2 TYP=5
	2695	SGMR	8	S	1338.5	1339.0	1.1	40.0			QL=6 ST=2 TYP=3
	2695	ATHN	8	S	1338.5	1339.1	2.0	30.0			QL=6 ST=2 TYP=3
	4995	SGMR	47	GB	1338.6	1338.8	3.9	230.0			QL=6 ST=2 TYP=5

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
17	8800	SGMR	47	GB	1338.6	1338.8	1.2	139.0			QL=6 ST=2 TYP=5
	15400	SGMR	47	GB	1338.6	1338.8	1.0	100.0			QL=6 ST=2 TYP=5
	2650	DWIN	1	S	1339.0	1339.0	1.0	25.0	10.0		
	9400	HUAN	30	PBI	1342.3	1342.3	51.2	20.8	9.1		R
	9400	HUAN	2	S/F	1408.9	1412.0	7.2	12.1	8.4		0
	2800	OTTA	20	GRF	1453.0	1458.0	75.0	16.8	5.6		
	2650	DWIN	1	S	1453.0	1502.0	10.0	15.0	7.0		
	9400	HUAN	20	GRF	1455.1	1501.0	25.4	13.0	6.7		R
	9400	HUAN	2	S/F	1544.7	1547.2	5.9	15.6	5.5		R
	930	BORD	8	S	1547.0	1547.0	.2	25.0	2.0		
	2800	OTTA	21	GRF	1605.0	1630.0	70.0	5.6	2.8		
	4995	ATHN	20	GRF	1606.8	1607.8	5.2	8.0			QL=6 ST=2 TYP=2
	8800	ATHN	20	GRF	1606.8	1607.8	6.2	13.0			QL=6 ST=2 TYP=2
	8800	SGMR	8	S	1608.1	1608.3	.2	20.0			QL=6 ST=2 TYP=3
	2800	OTTA	1	S	1612.7	1613.1	1.0	4.8	2.0		
	9400	HUAN	2	S/F	1620.8	1623.4	5.2	19.1	10.7		0
	8800	ATHN	4	S/F	1621.8	1622.6	2.7	11.0			QL=6 ST=2 TYP=3
	4995	ATHN	4	S/F	1621.8	1623.0	3.2	20.0			QL=6 ST=2 TYP=3
	2800	OTTA	2	S/F	1622.0	1623.0	2.0	4.0	2.0		
	9400	HUAN	29	PBI	1626.0	1626.0	14.1	8.7	4.1		0
	2800	OTTA	2	S/F	1637.5	1638.0	3.0	2.8	2.0		
	9400	HUAN	2	S/F	1654.6	1656.9	4.9	17.3	9.9		R
	2800	OTTA	4	S/F	1655.0	1656.5	4.0	16.2	7.4		
	9400	HUAN	2	S/F	1716.4	1717.5	3.4	6.9	5.2		R
	2800	OTTA	2	S/F	1719.0	1719.2	1.0	2.8			
	2800	OTTA	22	GRF	1720.0	1725.0	25.0	2.2			
	930	BORD	46	C	1747.0	1747.7	1.6	33.0	4.0		
	8800	PALE	47	GB	1824.6	1824.8	.2	300.0			QL=6 ST=2 TYP=5
	2800	OTTA	21	GRF	1834.0	1900.0	240.0	12.2	4.0		
	2800	OTTA	3	S	1834.5	1835.5	3.0	19.2	6.4		
	8800	SGMR	47	GB	1834.6	1835.3	6.9	189.0			QL=6 ST=2 TYP=5
	15400	SGMR	47	GB	1834.6	1835.3	9.7	100.0			QL=6 ST=3 TYP=5
	9400	HUAN	3	S	1834.6	1835.3	3.0	161.3	63.6		R
	4995	SGMR	47	GB	1834.6	1835.3	3.9	210.0			QL=6 ST=2 TYP=5
	8800	PALE	47	GB	1834.8	1835.3	5.0	219.0			QL=6 ST=2 TYP=5
	15400	PALE	47	GB	1834.8	1835.3	1.7	119.0			QL=6 ST=2 TYP=5
	4995	PALE	47	GB	1834.8	1835.5	3.3	219.0			QL=6 ST=2 TYP=5
	2695	SGMR	8	S	1835.0	1835.3	1.0	28.0			QL=6 ST=2 TYP=3
	2695	PALE	8	S	1835.1	1835.8	1.0	27.0			QL=6 ST=2 TYP=3
	9400	HUAN	30	PBI	1837.6	1837.6	52.0	12.1	9.3		R
	9400	HUAN	4	S/F	1848.7	1851.9	5.3	36.4	15.6		R
	2800	OTTA	4	S/F	1849.5	1851.8	4.5	15.4	3.9		
	1415	SGMR	4	S/F	1849.6	1851.8	2.5	42.0			QL=6 ST=2 TYP=3
	8800	PALE	47	GB	1849.8	1851.8	5.0	58.0			QL=6 ST=2 TYP=5
	4995	PALE	4	S/F	1850.1	1851.8	2.4	29.0			QL=6 ST=2 TYP=3
	4995	SGMR	4	S/F	1850.3	1851.6	2.2	26.0			QL=6 ST=2 TYP=3
	2695	PALE	8	S	1851.3	1851.8	1.0	22.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	1851.3	1851.8	.7	22.0			QL=6 ST=2 TYP=3
	15400	PALE	8	S	1851.8	1852.0	.3	30.0			QL=6 ST=2 TYP=3
	2800	OTTA	3	S	1900.5	1902.2	7.0	18.0	6.0		
	1415	SGMR	4	S/F	1900.6	1902.1	4.0	42.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	1901.3	1902.1	1.2	23.0			QL=6 ST=2 TYP=3
	100	HIRA	46	C	2006.2	2006.8	1.0	410.0	270.0		ML
	100	HIRA	46	C	2022.9	2024.0	2.3	2700.0	950.0		ML
	9400	HUAN	1	S	2025.1	2027.5	4.6	19.1	6.9		0
	9400	HUAN	20	GRF	2053.9	2104.1	16.7	6.9	4.2		0
	3750	TYKW	21	GRF	2130.0	2225.0	115.0	3.0	1.5		
	100	HIRA	46	C	2131.0	2132.0	4.4	7300.0	1620.0		ML
	2000	TYKW	45	C	2131.5	2131.9	2.5	16.0	5.0		
	2000	TYKW			2131.5	2132.8		10.0			
	3750	TYKW	45	C	2131.5	2133.2	7.5	31.0	7.0		
	9400	TYKW	45	C	2131.5	2133.2	2.5	110.0	37.0		
	2800	OTTA	3	S	2131.8	2132.4	2.0	13.0	6.5		
	1000	TYKW	45	C	2132.0	2132.6	2.0	9.0	2.0		
	200	HIRA	46	C	2132.0	2132.5	1.6	80.0	30.0		ML
	208	VORO	3	S	2132.0	2132.5	3.0	51.0			
	4995	SGMR	8	S	2132.1	2133.0	1.2	36.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	2132.3	2133.0	.7D	19.0			QL=6 ST=2 TYP=3
	8800	SGMR	8	S	2132.8	2133.1	.3	47.0			QL=6 ST=2 TYP=3
	9400	TYKW	29	PBI	2134.0		6.0	12.0	6.0		

SOLAR RADIO EMISSION
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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
17	2000	TYKW	29	PBI	2134.0		25.0	2.0	1.0		
	3750	TYKW	29	PBI	2139.0		15.0	2.0	1.0		
	1000	TYKW	45	C	2208.9	2209.0	.7	6.0	.5		
	9400	TYKW	5	S	2234.0	2237.0	8.0	11.0	6.0		
	9400	TYKW	29	PBI	2242.0		35.0	4.0	2.0		
	3750	TYKW	20	GRF	2250.0	2304.0	30.0	2.0	1.0		
	3750	TYKW	20	GRF	2340.0	2358.0	35.0	3.0	1.5		
	200	HIRA	46	C	2353.3	2353.7	1.0	330.0	95.0		ML
18	100	GORK	44	NS	0300.0E		540.0D		5.0		
	200	GORK	44	NS	0300.0E		540.0D		15.0		
	33	UPIC	43	NS	0538.0		646.4				
	260	ONDR	44	NS	0552.0E	1319.0U	505.0D	101.0U			
	127	TORN	44	NS	0600.0E	0913.5	470.0D	170.0	12.0		V1
	204	IZMI	43	NS	0600.0		360.0D	20.0			
	245	SGMR	43	NS	1251.0	2319.0	668.0D	570.0			QL=6 ST=2 TYP=1
	245	PALE	43	NS	1740.0	0158.3	668.0D	169.0			QL=6 ST=2 TYP=1
	100	HIRA	44	NS	1918.0E	0100.0	875.0D	20.0	10.0		WL
	200	HIRA	44	NS	1918.0E	2008.0	875.0D	450.0	15.0		ML
	208	VORO	44	NS	2100.0E		360.0D		20.0		
	245	LEAR	43	NS	2320.0	0014.3	610.0D	119.0			QL=6 ST=2 TYP=1
	3750	TYKW	20	GRF	0025.0	0100.0	90.0	2.0	1.0		
	9400	TYKW	21	GRF	0135.0	0216.0	75.0	10.0	3.0		
	3750	TYKW	45	C	0210.0	0216.2	14.0	17.0	5.0		
	2000	TYKW	21	GRF	0210.0	0216.3	60.0	3.0	1.0		
	8800	LEAR	4	S/F	0213.6	0216.3	9.5	10.0			QL=6 ST=2 TYP=3
	4995	LEAR	4	S/F	0213.6	0216.8	9.4	15.0			QL=6 ST=2 TYP=3
	1000	TYKW	5	S	0216.0	0216.3	1.0	1.0	.3		
	3750	TYKW	30	PBI	0224.0		45.0	4.0	2.0		
	3750	TYKW	5	S	0236.0	0236.6	3.0	61.0	15.0		
	2000	TYKW	5	S	0236.0	0236.6	15.0	1.5	.5		
	9400	TYKW	5	S	0236.0	0236.6	2.0	29.0	7.0		
	2695	MANI	1	S	0236.0	0236.3	1.2	7.2	2.4		
	8800	MANI	3	S	0236.0	0236.3	.6	43.9	14.6		
	4995	MANI	3	S	0236.0	0236.3	1.3	77.1	25.7		
	2840	PEKG	3	S	0236.3	0236.4	1.7	17.9	5.0		
	9395	PEKG	3	S	0236.3	0236.6	7.7	23.7	4.8		
	15400	LEAR	4	S/F	0236.5	0236.6	3.1	20.0			QL=6 ST=2 TYP=3
	4995	LEAR	47	GB	0236.5	0236.6	2.1	53.0			QL=6 ST=2 TYP=5
	2695	LEAR	4	S/F	0236.5	0236.6	3.1	18.0			QL=6 ST=2 TYP=3
	8800	LEAR	8	S	0236.5	0236.6	1.3	38.0			QL=6 ST=2 TYP=3
	9400	TYKW	29	PBI	0238.0		5.0	3.0	1.5		
	3750	TYKW	29	PBI	0239.0		10.0	4.0	2.0		
	3750	TYKW	5	S	0317.0	0331.0	25.0	3.0	1.5		
	3750	TYKW	20	GRF	0350.0	0404.0	65.0	5.0	2.0		
	2000	TYKW	20	GRF	0350.0	0408.0	60.0	2.0	1.0		
	2950	GORK	20	GRF	0354.0	0403.7	57.0	4.9			
	9400	TYKW	5	S	0413.0	0418.0	20.0	6.0	3.0		
	9400	TYKW	21	GRF	0413.0	0540.0	200.0	10.0	4.0		
	1000	TYKW	5	S	0417.0	0417.8	2.0	1.0	.3		
	3750	TYKW	21	GRF	0501.0	0506.0	120.0	4.0	2.0		
	2950	GORK	20	GRF	0502.3	0557.0	83.0	4.9			
	2000	TYKW	20	GRF	0520.0	0555.0	210.0	4.0	2.0		
	3750	TYKW	20	GRF	0530.0	0552.0	55.0	4.0	2.0		
	1000	TYKW	45	C	0547.2	0547.6	1.0	16.0	4.0		
	200	HIRA	42	SER	0739.5	0740.0	1.3	1770.0			O
	204	IZMI	41	F	0740.0	0740.5	1.8	870.0			
	9400	TYKW	20	GRF	0750.0	0805.0	55.0	8.0	3.0		
	15000	KISV	2	S/F	0750.2	0750.7	3.0	24.0			
	6100	KISV	20	GRF	0754.0	0805.4	35.0	7.0			
	3750	TYKW	20	GRF	0755.0	0805.0	45.0	6.0	3.0		
	930	BORD	41	F	0804.4	0804.5	.2	17.0	2.0		
	2650	DWIN	45	C	0808.0	0820.0	30.0	180.0	80.0		
	930	BORD	8	S	0832.6	0832.6	.1	16.0	1.0		
	2650	DWIN	1	S	0845.0	0847.0	3.0	18.0	10.0		
	3750	TYKW	5	S	0856.0	0900.0U	15.0	13.0D	5.0D		
	9400	TYKW	5	S	0856.0	0902.0	15.0	8.0	4.0D		
	6100	KISV	21	GRF	0857.0	0901.6	11.0	11.0			
	15000	KISV	21	GRF	0912.4	0914.8	9.0	15.0			
	2650	DWIN	1	S	0925.0	0925.0	1.0	16.0	8.0		

SOLAR RADIO EMISSION
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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
18	15000	KISV	2	S/F	0933.0	0933.5	2.0	12.0			
	11800	BERN	46	C	0940.0	1001.5	26.0U	183.0			
	8400	BERN	46	C	0940.0	1001.9	26.0U	142.0			
	8800	ATHN	47	GB	0940.1	0940.6	2.5	60.0			QL=6 ST=2 TYP=5
	15000	KISV	4	S/F	0940.2	0940.8	3.5	160.0			
	9100	GORK	21	GRF	0940.3		104.0				
	4995	ATHN	4	S/F	0940.3	0940.6	2.7	5.0			QL=6 ST=2 TYP=3
	6100	KISV	4	S/F	0940.3	0940.8	3.0	28.0			
	9100	GORK	3	S	0940.5	0940.7	1.1	90.0			
	6100	KISV	45	C	0945.0	0946.2	7.0	80.0			
	3100	CRIM	1	S	0945.0	0946.5	3.0	38.0	13.0		
	6100	KISV			0945.0	0946.8		75.0			
	2950	GORK	21	GRF	0945.3	0951.0	102.0D	6.3			
	8800	ATHN	4	S/F	0945.5	0946.1	7.3	48.0			QL=6 ST=2 TYP=3
	4995	ATHN	47	GB	0945.5	0946.1	7.5	110.0			QL=6 ST=2 TYP=5
	2695	ATHN	4	S/F	0945.5	0946.6	4.5	23.0			QL=6 ST=2 TYP=3
	15000	KISV	2	S/F	0945.6	0946.7	3.0	30.0			
	2950	GORK	3	S	0945.6	0947.0	2.8	28.0			
	9100	GORK	3	S	0945.7	0947.0	2.7	50.0			
	6100	KISV	29	PBI	0952.0	0952.0	35.0	17.0			
	8800	ATHN	47	GB	1001.0	1001.6	4.1	139.0			QL=6 ST=2 TYP=5
	8800	SGMR	47	GB	1001.1	1001.8	4.5	189.0			QL=4 ST=2 TYP=5
	9100	GORK	3	S	1001.2	1002.0	2.1	186.0			
	15000	KISV	4	S/F	1001.2	1002.2	3.0	195.9D			
	4995	ATHN	4	S/F	1001.3	1001.6	2.3	19.0			QL=6 ST=2 TYP=3
	6100	KISV	4	S/F	1001.3	1002.1	3.0	47.0			
	15400	SGMR	47	GB	1001.6	1001.8	4.0	110.0			QL=4 ST=2 TYP=5
	4995	SGMR	4	S/F	1001.6	1002.0	4.0	20.0			QL=4 ST=2 TYP=3
	930	BORD	8	S	1003.2	1003.3	.3	24.0	2.0		
	2650	DWIN	1	S	1004.0	1004.0	1.0	15.0	8.0		
	2950	GORK	1	S	1024.6	1024.9	.7	11.0			
	6100	KISV	2	S/F	1024.7	1025.0	1.0	5.0			
	3100	CRIM	1	S	1024.8	1025.1	1.0	13.0	4.0		
	15000	KISV	2	S/F	1026.0	1026.6	2.5	10.0			
	8800	ATHN	4	S/F	1041.3	1041.5	2.3	22.0			QL=6 ST=2 TYP=3
	15000	KISV	2	S/F	1041.4	1042.0	3.0	51.0			
	8800	SGMR	8	S	1041.6	1042.3	2.0	34.0			QL=4 ST=2 TYP=3
	6100	KISV	2	S/F	1041.7	1042.2	3.0	8.0			
	9100	GORK	1	S	1041.8	1042.1	1.4	27.0			
	15400	SGMR	8	S	1041.8	1042.1	.5	39.0			QL=4 ST=2 TYP=3
	810	KRAK	8	S	1054.0	1054.1	.2	67.0			
	15000	KISV	46	C	1101.5	1102.5	12.0	107.0			
	11800	BERN	46	C	1101.5	1103.8	6.0U	131.0			
	15000	KISV			1101.5	1103.8		100.0			
	8400	BERN	46	C	1101.5	1103.8	6.0U	256.0			
	15000	KISV			1101.5	1105.2		25.0			
	15000	KISV			1101.5	1109.9		36.0			
	6100	KISV	28	PRE	1101.8	1102.7	1.5	10.0			
	9100	GORK	4	S/F	1102.0	1103.7	2.7	186.0			
	15400	SGMR	47	GB	1102.1	1102.3	2.0	92.0			QL=3 ST=2 TYP=5
	4995	SGMR	47	GB	1102.1	1103.6	5.7	280.0			QL=3 ST=2 TYP=5
	8800	SGMR	47	GB	1102.1	1103.6	3.2	200.0			QL=3 ST=2 TYP=5
	6100	KISV	8	S	1103.3	1103.8	1.0	125.0U			
	2950	GORK	3	S	1103.4	1103.8	1.5	22.0			
	2695	SGMR	8	S	1103.6	1103.6	.2	20.0			QL=3 ST=2 TYP=3
	3100	CRIM	1	S	1103.6	1104.2	1.0	24.0	7.0		
	6100	KISV	29	PBI	1104.0	1104.4	20.0	25.0			
	15400	SGMR	8	S	1109.8	1110.0	.3	34.0			QL=3 ST=3 TYP=3
	2800	OTTA	22	GRF	1155.0	1210.0	115.0	7.6	3.8		
	930	BORD	41	F	1208.4	1208.6	.2	42.0	2.0		
	8800	ATHN	8	S	1213.8	1214.1	1.2	13.0			QL=6 ST=2 TYP=3
	6100	KISV	2	S/F	1213.8	1214.8	3.0	8.0			
	8800	SGMR	8	S	1214.1	1214.3	.5	28.0			QL=3 ST=2 TYP=3
	930	BORD	41	F	1229.6	1229.9	1.3	37.0	2.0		
	6100	KISV	21	GRF	1240.0	1242.2	11.0	16.0			
	4995	ATHN	4	S/F	1241.0	1241.8	4.5	27.0			QL=6 ST=2 TYP=3
	4995	SGMR	4	S/F	1241.5	1242.0	4.6	36.0			QL=3 ST=2 TYP=3
	610	SGMR	4	S/F	1310.1	1312.6	3.0	22.0			QL=6 ST=2 TYP=3
	2800	OTTA	2.	GRF	1420.0	1550.0	200.0	15.4	5.0		
	930	BORD	45	C	1510.0	1513.8	21.0	233.0	35.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
18	19600	BERN	3	S	1511.0	1514.0	30.0U	263.0			
	2650	DWIN	4	S/F	1511.0	1514.0	10.0	140.0	60.0		
	8400	BERN	3	S	1511.0	1514.0	30.0	354.0			
	11800	BERN	3	S	1511.0	1514.0	30.0	428.0			
	1415	ATHN	47	GB	1511.8	1514.0	10.5	200.0			QL=6 ST=2 TYP=5
	8800	ATHN	47	GB	1511.8	1514.0	10.2	300.0			QL=6 ST=2 TYP=5
	2800	OTTA	4	S/F	1512.0	1514.0	8.0	260.0	66.6		
	2695	ATHN	47	GB	1512.3	1514.0	7.7	280.0			QL=6 ST=2 TYP=5
	4995	ATHN	47	GB	1512.3	1514.0	8.2	210.0			QL=6 ST=2 TYP=5
	2800	OTTA	29	PBI	1520.0	1520.0	15.0	12.0	4.0		
	4995	SGMR	8	S	1549.8	1550.1	.3	13.0			QL=6 ST=3 TYP=3
	2800	OTTA	4	S/F	1626.5	1628.5	13.0	16.2	5.4		
	9400	HUAN	4	S/F	1626.7	1632.0	6.5	23.8	13.8		R
	930	BORD	8	S	1628.3	1628.3	.1	17.0	1.0		
	2650	DWIN	2	S/F	1632.0	1634.0	3.0	16.0	8.0		
	9400	HUAN	30	PBI	1633.2	1633.2	70.2	12.7	5.7		R
	9400	HUAN	2	S/F	1658.7	1659.8	4.3	17.5	10.6		R
	8800	SGMR	8	S	1659.3	1659.5	.5	30.0			QL=6 ST=2 TYP=3
	2695	SGMR	4	S/F	1803.1	1804.3	2.7	33.0			QL=6 ST=2 TYP=3
	2800	OTTA	3	S	1828.5	1830.0	5.0	11.2	3.8		
	9400	HUAN	1	S	1901.9	1903.0	2.5	4.8	2.5		0
	2800	OTTA	4	S/F	1902.5	1902.8	1.0	15.4	3.8		
	245	SGMR	8	S	1902.6	1902.8	.7	470.0			QL=6 ST=2 TYP=3
	410	SGMR	8	S	1902.8	1902.8	.3	33.0			QL=6 ST=2 TYP=3
	245	PALE	49	GB	1902.8	1903.0	2.3	840.0			QL=6 ST=2 TYP=6
	410	PALE	8	S	1902.8	1903.0	.3	50.0			QL=6 ST=2 TYP=3
	410	SGMR	47	GB	1946.3	1948.1	16.3	139.0			QL=6 ST=2 TYP=5
	4995	SGMR	47	GB	1948.0	1949.8	14.6	100.0			QL=6 ST=2 TYP=5
	245	SGMR	4	S/F	1948.1	1948.3	14.5	270.0			QL=6 ST=2 TYP=3
	8800	SGMR	47	GB	1948.3	1949.6	14.3	130.0			QL=6 ST=2 TYP=5
	1415	SGMR	47	GB	1948.6	1949.8	14.0	110.0			QL=6 ST=2 TYP=5
	15400	SGMR	47	GB	1948.8	1949.6	13.8	100.0			QL=6 ST=2 TYP=5
	2695	SGMR	47	GB	1949.0	1949.8	13.6	73.0			QL=6 ST=2 TYP=5
	610	SGMR	47	GB	1949.3	1949.8	13.3	58.0			QL=6 ST=2 TYP=5
	9400	HUAN	20	GRF	1956.2	2010.5	19.2	3.2	1.3		0
	9400	HUAN	1	S	2025.4	2026.0	2.5	6.4	3.4		R
	2800	OTTA	3	S	2101.0	2101.2	1.0	14.6	5.0		
	15400	SGMR	8	S	2101.1	2101.3	.2	41.0			QL=6 ST=2 TYP=3
	8800	PALE	8	S	2101.1	2101.3	.2	49.0			QL=6 ST=2 TYP=3
	15400	PALE	47	GB	2101.1	2101.3	.4	96.0			QL=6 ST=2 TYP=5
	4995	PALE	8	S	2101.1	2101.3	.2	26.0			QL=6 ST=2 TYP=3
	410	SGMR	49	GB	2105.5	2105.6	.3	1100.0			QL=6 ST=2 TYP=6
	410	PALE	49	GB	2105.5	2105.6	1.1	1399.0			QL=6 ST=2 TYP=6
	9400	HUAN	1	S	2117.0	2118.5	2.8	9.5	4.4		0
	1000	TYKW	8	S	2117.5	2117.6	.2	14.0	4.0		
	1000	TYKW	45	C	2118.3	2118.6	1.0	4.0	.7		
	3750	TYKW	45	C	2136.0	2140.4	29.0	72.0	23.0		
	1000	TYKW	45	C	2136.0	2140.5	6.0	25.0	9.0		
	2000	TYKW	45	C	2136.0	2140.5	15.0	94.0	17.0		
	100	HIRA	46	C	2136.3	2137.0	5.0	2900.0	306.0		ML
	2800	OTTA	4	S/F	2136.5	2140.2	5.5	77.0	30.0		
	1415	PALE	47	GB	2136.6	2140.5	4.9	68.0			QL=6 ST=2 TYP=5
	9400	HUAN	21	GRF	2136.8	2153.5	26.2	30.2	19.2		R
	9400	TYKW	45	C	2137.0	2140.4	43.0U	57.0U	19.0U		RAIN
	500	HIRA	45	C	2137.0	2140.1	7.0	17.0	6.0		WL
	1415	SGMR	20	GRF	2137.0	2140.3	4.0	57.0			QL=6 ST=2 TYP=2
	2695	PALE	47	GB	2137.1	2140.3	15.2	90.0			QL=6 ST=2 TYP=5
	2695	SGMR	47	GB	2137.1	2140.3	17.2	76.0			QL=6 ST=2 TYP=5
	4995	PALE	47	GB	2137.5	2140.3	14.8	93.0			QL=6 ST=2 TYP=5
	610	PALE	47	GB	2137.6	2140.1	14.7	180.0			QL=6 ST=2 TYP=5
	610	SGMR	47	GB	2137.8	2140.1	3.0	82.0			QL=6 ST=2 TYP=5
	8800	PALE	47	GB	2138.0	2140.3	14.3	96.0			QL=6 ST=2 TYP=5
	15400	PALE	47	GB	2138.6	2140.1	13.7	48.0			QL=6 ST=2 TYP=5
	9400	HUAN	3	S	2139.0	2140.4	2.4	54.1	23.0		R
	4995	SGMR	8	S	2139.8	2140.1	.7	41.0			QL=6 ST=2 TYP=3
	1000	TYKW	29	PBI	2142.0		13.0	4.0	1.5		
	2800	OTTA	30	PBI	2142.0	2142.0	90.0	22.2	10.0		
	2800	OTTA	40	F	2142.8	2147.7	5.5	16.2			
	100	HIRA	46	C	2145.3	2150.1	10.0	700.0	157.0		0
	2000	TYKW	30	PBI	2151.0		90.0	10.0	4.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
18	8800	PALE	20	GRF	2152.3	2152.5	10.7	59.0			QL=6 ST=2 TYP=2
	4995	PALE	20	GRF	2152.3	2152.5	10.7	46.0			QL=6 ST=2 TYP=2
	15400	PALE	20	GRF	2152.3	2152.5	10.7	53.0			QL=6 ST=2 TYP=2
	2695	PALE	20	GRF	2152.3	2152.6	8.8	28.0			QL=6 ST=2 TYP=2
	610	PALE	20	GRF	2152.3	2153.3	3.8	51.0			QL=6 ST=2 TYP=2
	1000	TYKW	21	GRF	2200.0	2233.0	145.0	3.0	1.0		
	3750	TYKW	30	PBI	2205.0		65.0	12.0	5.0		
	3750	TYKW	20	GRF	2218.0	2231.0	35.0	6.0	2.0		
	9400	TYKW	30	PBI	2220.0U		60.0U	16.0	8.0		
	9400	TYKW	45	C	2225.8	2226.3	2.0	14.0	4.0		
	2000	TYKW	5	S	2231.0	2232.7	3.0	6.0	2.0		
	2000	TYKW	29	PBI	2234.0		9.0	2.0	1.0		
	3750	TYKW	5	S	2254.5	2254.9	1.5	6.0	1.5		
	2000	TYKW	8	S	2254.7	2254.9	.4	2.0	.5		
	2800	OTTA	8	S	2255.0	2255.0	.1	4.8			
	200	HIRA	41	F	2323.2	2330.1	9.0	750.0			SL
	3750	TYKW	21	GRF	2331.0	2359.0	90.0	4.0	2.0		
	3750	TYKW	5	S	2335.0	2335.7	3.0	1.5	.5		
	1000	TYKW	5	S	2335.4	2335.7	.8	2.0	.5		
	9400	TYKW	21	GRF	2342.0	0003.0	60.0	7.0	2.5		
	200	HIRA	42	SER	2348.0	0024.0	154.0	290.0			ML
19	100	GORK	44	NS	0303.0E		405.0D		10.0		
	200	GORK	44	NS	0304.0E		403.0D		5.0		
	260	ONDR	44	NS	0614.0E	1254.0U	412.0D	131.0U			
	245	SGMR	43	NS	0929.0	1253.6		530.0			QL=6 ST=2 TYP=1
	200	HIRA	44	NS	1918.0E	0412.0	875.0D	85.0	15.0		MR
	245	PALE	43	NS	1937.6	1948.3	558.4D	420.0			QL=6 ST=2 TYP=1
	208	VORO	44	NS	2100.0E		360.0D		10.0		
	245	LEAR	43	NS	2320.0	0303.3	610.0D	160.0			QL=6 ST=2 TYP=1
	3750	TYKW	5	S	0019.0	0019.6	1.0	13.0	6.0		
	9400	TYKW	5	S	0019.0	0019.8	1.2	4.0	1.5		
	4995	LEAR	8	S	0019.0	0019.6	1.5	16.0			QL=6 ST=2 TYP=3
	8800	LEAR	8	S	0019.1	0019.6	1.7	11.0			QL=6 ST=2 TYP=3
	2695	PENT	3	S	0019.9	0020.5	9.1	245.0	61.0		
	3750	TYKW	29	PBI	0020.0		15.0	5.0	2.5		
	9400	TYKW	21	GRF	0045.0	0145.0	160.0	5.0	2.0		
	2930	VORO	3	S	0045.0	0047.0	5.0	99.0			
	9400	TYKW	45	C	0046.0	0049.0	5.0	76.0	20.0		
	2840	PEKG	45	C	0046.0	0048.8	9.0	112.0	15.9		
	2695	LEAR	47	GB	0046.1	0048.8	7.4	100.0			QL=6 ST=2 TYP=5
	3750	TYKW	45	C	0046.5	0048.9	5.5	134.0	24.0		
	2695	PENT	4	S/F	0046.5	0049.0	6.0	90.0	22.4		
	2000	TYKW	45	C	0046.5	0049.0	7.5	62.0	14.0		
	1000	TYKW	45	C	0046.7	0049.3	7.3	21.0	10.0		
	8800	LEAR	47	GB	0046.8	0048.8	3.8	100.0			QL=6 ST=2 TYP=5
	1415	LEAR	4	S/F	0046.8	0049.0	6.3	44.0			QL=6 ST=2 TYP=3
	4995	LEAR	47	GB	0047.0	0048.8	3.8	160.0			QL=6 ST=2 TYP=5
	9395	PEKG	45	C	0047.0	0048.8	3.0	114.0	20.7		
	4995	MANI	4	S/F	0047.0	0049.1	4.2	236.6	78.9		
	2695	MANI	4	S/F	0047.0	0049.1	4.0	139.2	46.4		
	8800	PALE	47	GB	0047.1	0048.8	5.2	119.0			QL=6 ST=2 TYP=5
	1415	MANI	3	S	0047.2	0049.2	3.8	58.5	19.5		
	8800	MANI	4	S/F	0047.2	0049.2	5.0	84.0	28.0		
	4995	PALE	47	GB	0047.3	0048.8	2.5	169.0			QL=6 ST=2 TYP=5
	1415	PALE	4	S/F	0047.8	0049.0	2.5	48.0			QL=6 ST=2 TYP=3
	2695	PALE	47	GB	0048.3	0048.8	1.5	89.0			QL=6 ST=2 TYP=5
	15400	LEAR	4	S/F	0048.6	0048.8		18.0			QL=6 ST=2 TYP=3
	610	LEAR	47	GB	0048.8	0049.0	.3	130.0			QL=6 ST=2 TYP=5
	606	MANI	3	S	0049.0	0049.2	.4	23.2	7.7		
	9395	PEKG	29	PBI	0050.0		12.0	22.3	3.4		
	9400	TYKW	29	PBI	0051.0		12.0	11.0	4.0		
	3750	TYKW	29	PBI	0052.0		8.0	6.0	3.0		
	2695	PENT	29	PBI	0052.5	0052.5	7.0	5.0	2.5		
	1000	TYKW	29	PBI	0054.0		35.0	1.5	.5		
	2000	TYKW	29	PBI	0054.0		60.0	4.0	1.0		
	3750	TYKW	21	GRF	0105.0	0221.0	210.0	8.0	3.0		
	9400	TYKW	45	C	0107.0	0107.6	10.0	11.0	4.0		
	3750	TYKW	5	S	0123.0	0125.7	6.0	1.5	.5		
	9400	TYKW	45	C	0124.0	0125.3	9.0	7.0	2.5		

SOLAR RADIO EMISSION
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JUNE 1982

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
19	9400	TYKW	5	S	0152.0	0152.4	2.0	7.0	2.0		
	2000	TYKW	21	GRF	0210.0	0235.0	130.0	4.0	1.5		
	1000	TYKW	21	GRF	0210.0	0235.0	115.0	3.5	1.5		
	2000	TYKW	42	SER	0219.0	0221.7	9.0	5.0	1.0		
	1000	TYKW	42	SER	0221.0	0227.0	6.5	7.0	.7		
	3750	TYKW	5	S	0233.0	0236.0	7.0	3.0	1.5		
	100	HIRA	27	RF	0233.0	0250.0	155.0	300.0	95.0		ML
	3750	TYKW	5	S	0247.5	0248.5	2.5	11.0	3.0		
	9400	TYKW	5	S	0251.0	0251.2	1.0	4.0	1.5		
	3750	TYKW	5	S	0254.0	0257.1	12.0	4.0	1.5		
	2000	TYKW	45	C	0255.0	0256.0	8.0	5.0	1.5		
	1000	TYKW	5	S	0255.0	0257.3	5.0D	3.0	1.0D		
	9400	TYKW	5	S	0255.0	0300.0	15.0	9.0	3.0		
	2000	TYKW	5	S	0311.5	0312.5	16.0	1.5	.5		
	9400	TYKW	5	S	0313.0	0315.0	10.0	4.0	1.5		
	3750	TYKW	5	S	0330.0	0330.6	6.0	3.0	1.0		
	650	GORK	1	S	0336.7	0339.7	5.6	4.0	2.0		
	8800	LEAR	4	S/F	0337.5	0339.3	3.5	20.0			QL=6 ST=2 TYP=3
	2000	TYKW	5	S	0338.0	0339.3	3.0	8.0	3.0		
	9400	TYKW	5	S	0338.0	0339.3	4.0	13.0	6.0		
	3750	TYKW	5	S	0338.0	0339.4	5.0	4.0	1.5		
	1000	TYKW	45	C	0338.0	0339.5	6.0	6.0	1.5		
	15400	LEAR	4	S/F	0338.0	0339.3	3.0	13.0			QL=6 ST=2 TYP=3
	1415	LEAR	4	S/F	0338.1	0338.8	2.9	18.0			QL=6 ST=2 TYP=3
	4995	LEAR	4	S/F	0338.1	0340.0	2.9	4.0			QL=6 ST=2 TYP=3
	9100	GORK	2	S/F	0338.3	0339.4	3.8	18.0			
	2950	GORK	1	S	0338.8	0339.4	2.5	6.4			
	2695	LEAR	4	S/F	0338.8	0340.0	2.2	5.0			QL=6 ST=2 TYP=3
	610	LEAR	4	S/F	0338.8	0340.1	2.2	5.0			QL=6 ST=2 TYP=3
	200	GORK	4	S/F	0339.0	0339.2	1.0	140.0			
	950	GORK	1	S	0339.0	0339.8	5.6	5.0			
	100	GORK	46	C	0339.2	0339.3	.5	450.0			
	100	GORK			0339.2	0339.5		370.0			
	2000	TYKW	29	PBI	0341.0		20.0	2.0	.7		
	9400	TYKW	29	PBI	0342.0		20.0	4.0	2.0U		INTERFERENCE
	410	LEAR	8	S	0427.0	0427.1	.1	17.0			QL=6 ST=2 TYP=3
	9400	TYKW	5	S	0431.5	0434.0	7.0	4.0	1.5		
	9400	TYKW			0441.0	0443.0		8.0			
	9400	TYKW	45	C	0441.0	0453.0	17.0	9.0	4.0		
	9100	GORK	20	GRF	0441.1	0452.9	15.8	12.0			
	3750	TYKW	21	GRF	0448.0	0456.0	30.0	3.0	1.0		
	3750	TYKW	5	S	0501.0	0502.1	3.0	4.0	1.5		
	1000	TYKW	45	C	0501.6	0502.0	1.0	83.0	10.0		
	650	GORK	40	F	0501.6	0502.2	.8	8.0			
	2000	TYKW	5	S	0501.7	0502.1	1.5	2.5	1.0		
	2950	GORK	1	S	0501.7	0502.2	1.2	3.8			
	950	GORK	2	S/F	0501.8	0508.0	9.0	34.0			
	410	LEAR	8	S	0502.0	0502.1	.1	22.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0502.0	0502.1	.1	11.0			QL=6 ST=2 TYP=3
	9400	TYKW	5	S	0521.0	0523.0	15.0	4.0	1.5		
	3750	TYKW	20	GRF	0538.0	0614.0	85.0	3.0	1.0		
	2000	TYKW	21	GRF	0558.0	0609.0	35.0	2.0	1.0		
	2000	TYKW	5	S	0559.0	0600.0	3.0	1.0	.3		
	9400	TYKW	5	S	0705.0	0709.0	17.0	8.0	2.5		
	9400	TYKW	28	PRE	0727.0	0732.3	22.5	5.0	2.0		
	2000	TYKW	21	GRF	0735.0	0748.0	40.0	4.0	2.0		
	3750	TYKW	45	C	0736.0	0751.5	25.0	20.0	6.0		
	2950	GORK	3	S	0737.8	0751.6	29.9	12.8			
	2695	LEAR	20	GRF	0744.5	0746.1	4.5	13.0			QL=6 ST=2 TYP=2
	8400	BERN	4	S/F	0749.0	0750.9	7.0	26.0			
	11800	BERN	4	S/F	0749.0	0750.9	7.0	55.0			
	19600	BERN	4	S/F	0749.0	0750.9	7.0U	38.0			
	9395	PEKG	3	S	0749.0	0751.0	7.0	26.3	2.8		
	9400	TYKW	45	C	0749.5	0750.9	5.5	30.0	14.0		
	8800	ATHN	4	S/F	0749.6	0751.3	6.9	15.0			QL=5 ST=2 TYP=3
	2840	PEKG	3	S	0749.8	0751.2	5.2	11.9	5.9		
	4995	ATHN	4	S/F	0750.0	0750.8	2.6	7.0			QL=5 ST=2 TYP=3
	2000	TYKW	5	S	0750.5	0751.6	4.5	3.0	1.0		
	9100	GORK	20	GRF	0750.5	0752.3	12.9	28.0			
	15400	LEAR	4	S/F	0750.6	0750.8	2.7	42.0			QL=6 ST=2 TYP=3

SOLAR RADIO EMISSION
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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
19	15000	KISV	45	C	0750.6	0751.0	4.0	58.0			
	650	GORK	22	GRF	0750.6	0751.5	8.4	4.5			
	1000	TYKW	5	S	0750.6	0751.5	2.4	7.0	4.0		
	15000	KISV			0750.6	0752.0		48.0			
	6100	KISV	20	GRF	0750.7	0751.5	5.0	9.0			
	8800	LEAR	4	S/F	0750.8	0750.8	3.2	23.0			QL=6 ST=2 TYP=3
	430	KRAK	8	S	0750.8	0751.0	.8	60.0			
	410	LEAR	47	GB	0750.8	0751.3	1.3	95.0			QL=6 ST=2 TYP=5
	950	GORK	1	S	0750.8	0751.6	5.0	7.5			
	4995	LEAR	8	S	0751.6	0751.8	.4	6.0			QL=6 ST=2 TYP=3
	1000	TYKW	29	PBI	0753.0		8.0	2.0	1.0		
	9400	TYKW	29	PBI	0755.0		20.0	6.0	2.0		
	3750	TYKW	29	PBI	0801.0		10.0	3.0	1.5		
	2000	TYKW	45	C	0818.0	0828.0	22.0	113.0	42.0		
	2840	PEKG	45	C	0818.0	0827.7	15.0	295.0	75.1		
	2950	GORK	21	GRF	0818.3	0837.4	89.0	21.0			
	650	GORK	21	GRF	0819.8	0831.5	79.0D	13.0			
	3750	TYKW	45	C	0820.0	0827.7	18.0	340.0	70.0		
	2650	DWIN	45	C	0820.0	0828.0	20.0	210.0	100.0		
	430	KRAK	45	C	0821.8	0828.2	11.2	150.0	9.0		
	2695	MANI	4	S/F	0822.0	0826.9	10.0	199.9	66.6		
	2695	ATHN	47	GB	0822.3	0827.8	16.2	300.0			QL=6 ST=2 TYP=5
	9400	TYKW	45	C	0822.5	0827.6	10.5	54.0	20.0		
	2695	LEAR	47	GB	0822.6	0827.1	15.7	189.0			QL=6 ST=2 TYP=5
	1000	TYKW	45	C	0823.0	0827.4	10.0	65.0	20.0		
	3000	IZMI	7	C	0823.0	0827.0	8.0	188.0	80.0		
	8400	BERN	3	S	0823.0	0827.6	18.0U	26.0			
	11800	BERN	3	S	0823.0	0827.9	18.0U	55.0			
	4995	MANI	4	S/F	0823.1	0826.9	7.4	228.6	76.2		
	1415	ATHN	4	S/F	0823.3	0828.0	15.2	45.0			QL=6 ST=2 TYP=3
	4995	ATHN	47	GB	0823.6	0827.8	14.9	210.0			QL=6 ST=2 TYP=5
	1415	MANI	3	S	0823.9	0827.0	7.6	44.5	14.8		
	810	KRAK	45	C	0823.9	0828.5	8.2	49.0	20.0		
	500	HIRA	45	C	0824.0	0824.9	11.5	40.0	8.0		WL
	8800	MANI	3	S	0824.0	0826.6	6.5	11.1	3.7		
	606	MANI	4	S/F	0824.0	0827.0	7.0	75.8	25.3		
	9395	PEKG	4	S/F	0824.0	0827.6	13.0	53.6	14.9		
	950	GORK	4	S/F	0824.0	0828.0	7.8	51.0			
	2950	GORK	45	C	0824.2	0825.3	9.0	89.0			
	2950	GORK			0824.2	0826.4		90.0			
	2950	GORK			0824.2	0837.7		229.0			
	9100	GORK	21	GRF	0824.5		66.0				
	4995	LEAR	47	GB	0824.6	0827.1	10.2	189.0			QL=6 ST=2 TYP=5
	650	GORK	4	S/F	0824.7	0828.2	6.8	55.0	13.0		
	410	LEAR	47	GB	0824.8	0825.1	4.0	280.0			QL=6 ST=2 TYP=5
	8800	ATHN	47	GB	0824.8	0827.8	13.7	71.0			QL=6 ST=2 TYP=5
	8800	LEAR	47	GB	0825.0	0827.1	8.5	44.0			QL=6 ST=2 TYP=5
	610	LEAR	47	GB	0825.3	0826.0	6.5	38.0			QL=6 ST=2 TYP=5
	1415	LEAR	4	S/F	0826.3	0827.1	6.3	22.0			QL=6 ST=2 TYP=3
	9100	GORK	3	S	0826.8	0827.6	2.3	49.0			
	950	GORK	29	PBI	0831.8	0831.9	11.5	6.0			
	1000	TYKW	29	PBI	0833.0		25.0U	3.0	1.0U		
	9400	TYKW	30	PBI	0833.0		50.0D	12.0	8.0D		
	2840	PEKG	29	PBI	0833.0		37.0D	40.7			
	3750	TYKW	29	PBI	0838.0		45.0D	15.0	8.0D		
	2000	TYKW	29	PBI	0840.0		35.0D	16.0	13.0D		
	6100	KISV	20	GRF	0858.0	0900.0	14.0	10.0			
	2800	OTTA	23	GRF	1100.0	1254.0	215.0	21.6	10.0		
	8400	BERN	41	F	1101.0	1103.4	14.0	80.0			
	11800	BERN	41	F	1101.0	1103.5	7.0	107.0			
	8800	ATHN	47	GB	1102.5	1103.5	2.8	51.0			QL=6 ST=2 TYP=5
	4995	ATHN	4	S/F	1102.6	1103.5	2.5	16.0			QL=6 ST=2 TYP=3
	2695	ATHN	4	S/F	1102.8	1103.5	2.5	31.0			QL=6 ST=2 TYP=3
	2650	DWIN	1	S	1103.0	1103.0	2.0	35.0	15.0		
	2800	OTTA	3	S	1103.0	1103.5	2.5	37.0	18.6		
	6100	KISV	4	S/F	1103.0	1103.5	2.0	28.0			
	19600	BERN	41	F	1103.0	1103.5	7.0	20.0			
	1415	ATHN	8	S	1103.0	1103.6	2.0	4.0			QL=6 ST=2 TYP=3
	8800	SGMR	47	GB	1103.1	1103.3	.5	69.0			QL=6 ST=2 TYP=5
	15400	SGMR	47	GB	1103.1	1103.3	4.0	50.0			QL=6 ST=2 TYP=5

SOLAR RADIO EMISSION
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JUNE 1982

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
19	2695	SGMR	8	S	1103.1	1103.5	.9	40.0			QL=6 ST=2 TYP=3
	4995	SGMR	8	S	1103.1	1103.5	.4	20.0			QL=6 ST=2 TYP=3
	2650	DWIN	1	S	1108.0	1108.0	2.0	50.0	25.0		
	2800	OTTA	3	S	1108.0	1108.3	4.0	51.0	12.6		
	8800	ATHN	4	S/F	1108.0	1108.3	2.6	32.0			QL=6 ST=3 TYP=3
	4995	ATHN	47	GB	1108.1	1108.3	3.2	55.0			QL=6 ST=3 TYP=5
	2695	ATHN	4	S/F	1108.1	1108.5	3.5	49.0			QL=6 ST=3 TYP=3
	1415	ATHN	4	S/F	1108.1	1108.6	3.2	7.0			QL=6 ST=3 TYP=3
	2695	SGMR	4	S/F	1108.1	1108.6	2.4	45.0			QL=6 ST=2 TYP=3
	4995	SGMR	8	S	1108.1	1108.6	1.4	43.0			QL=6 ST=2 TYP=3
	6100	KISV	4	S/F	1108.2	1108.6	2.0	43.0			
	1415	SGMR	8	S	1108.5	1108.6	1.1	22.0			QL=6 ST=2 TYP=3
	2800	OTTA	45	C	1147.0	1148.3	11.0	13.4	-3.8		
	2650	DWIN	1	S	1148.0	1148.0	1.0	15.0	8.0		
	6100	KISV	1	S	1153.0	1153.8	3.0	7.0			
	430	KRAK	42	SER	1217.3	1228.4	11.7	41.0			
	2800	OTTA	20	GRF	1223.0	1228.0	19.0	11.2	5.2		
	2650	DWIN	1	S	1225.0	1228.0	5.0	10.0	5.0		
	410	SGMR	47	GB	1305.1	1305.3	.2	98.0			QL=6 ST=2 TYP=5
	2800	OTTA	1	S	1323.0	1325.0	9.0	4.8	2.3		
	9400	HUAN	2	S/F	1323.2	1325.6	6.1	12.2	6.5		0
	9400	HUAN	29	PBI	1329.3	1329.3	21.2	3.5	2.1		0
	2800	OTTA	1	S	1347.2	1347.3	2.0	7.4	3.4		
	410	SGMR	8	S	1425.8	1427.6	1.8	30.0			QL=6 ST=2 TYP=3
	2800	OTTA	21	GRF	1516.0	1523.0	18.0	3.2	1.8		
	9400	HUAN	20	GRF	1517.8	1527.5	37.2	4.4	3.3		0
	2800	OTTA	1	S	1518.5	1519.0	1.2	3.4	1.7		
	9400	HUAN	1	S	1623.2	1625.0	3.0	3.5	2.3		0
	1415	ATHN	47	GB	1712.6	1717.8	13.7	96.0			QL=5 ST=2 TYP=5
	2800	OTTA	46F	C	1715.0	1717.5	8.0	110.0	32.0		
	2695	ATHN	47	GB	1715.6	1717.8	13.4	100.0			QL=5 ST=2 TYP=5
	4995	ATHN	47	GB	1715.8	1717.5	13.2	86.0			QL=5 ST=2 TYP=5
	8800	ATHN	47	GB	1715.8	1717.5	13.2	78.0			QL=5 ST=2 TYP=5
	2650	DWIN	4	S/F	1716.0	1717.0	8.0	100.0	50.0		
	19600	BERN	3	S	1716.0	1717.4	10.0	59.0			
	8400	BERN	3	S	1716.0	1717.4	10.0	126.0			
	11800	BERN	3	S	1716.0	1717.4	10.0	100.0			
	2695	SGMR	47	GB	1716.5	1717.5	5.3	110.0			QL=6 ST=2 TYP=5
	2695	PALE	47	GB	1716.6	1717.5	5.4	119.0			QL=6 ST=2 TYP=5
	4995	SGMR	47	GB	1716.8	1717.3	1.2	100.0			QL=6 ST=2 TYP=5
	4995	PALE	47	GB	1716.8	1717.3	4.0	119.0			QL=6 ST=2 TYP=5
	8800	SGMR	47	GB	1716.8	1717.3	1.3	100.0			QL=6 ST=2 TYP=5
	1415	SGMR	47	GB	1716.8	1717.6	5.8	90.0			QL=6 ST=2 TYP=5
	15400	SGMR	47	GB	1717.0	1717.3	1.8	80.0			QL=6 ST=2 TYP=5
	610	SGMR	4	S/F	1717.1	1717.3	4.2	30.0			QL=6 ST=2 TYP=3
	15400	PALE	47	GB	1717.1	1717.3	1.0	88.0			QL=6 ST=2 TYP=5
	410	SGMR	47	GB	1717.1	1717.3	.4	74.0			QL=6 ST=2 TYP=5
	8800	PALE	47	GB	1717.1	1717.3	1.2	139.0			QL=6 ST=2 TYP=5
	1415	PALE	47	GB	1717.1	1717.6	6.4	90.0			QL=6 ST=2 TYP=5
	610	PALE	4	S/F	1717.6	1717.8	2.2	17.0			QL=6 ST=2 TYP=3
	9400	HUAN	29	PBI	1718.2E	1718.2U	28.8D	17.5	6.1		R
	2800	OTTA	29	PBI	1723.0	1723.0	40.0	11.2	3.8		
	9400	HUAN	2	S/F	1815.5	1816.8	2.3	15.8	6.4		R
	2650	DWIN	2	S/F	1816.0	1816.0	1.0	30.0	15.0		
	2800	OTTA	4	S/F	1816.0	1816.8	1.5	32.0	13.0		
	1415	SGMR	47	GB	1816.1	1816.8	2.4	56.0			QL=6 ST=2 TYP=5
	8800	SGMR	4	S/F	1816.1	1816.8	3.9	33.0			QL=6 ST=2 TYP=3
	4995	SGMR	8	S	1816.6	1816.6	1.5	27.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	1816.6	1816.8	1.2	27.0			QL=6 ST=2 TYP=3
	1415	PALE	47	GB	1816.6	1816.8	.5	50.0			QL=6 ST=2 TYP=5
	2695	PALE	8	S	1816.6	1817.0	.5	30.0			QL=6 ST=3 TYP=3
	2800	OTTA	29	PBI	1817.5	1817.5	6.0	6.6	2.2		
	2800	OTTA	1	S	1825.5	1826.0	9.0	6.6	2.2		
	2800	OTTA	21	GRF	1905.0	1940.0	95.0	13.0	6.5		
	2800	OTTA	1	S	1910.0	1911.0	3.0	2.6	1.3		
	2695	SGMR	4	S/F	1916.6	1919.3	3.9	17.0			QL=6 ST=2 TYP=3
	4995	SGMR	4	S/F	1917.0	1919.3	5.1	11.0			QL=6 ST=2 TYP=3
	9400	HUAN	1	S	1917.5	1920.4	5.2	14.0	7.9		0
	2800	OTTA	1	S	1918.0	1919.5	7.0	8.6	4.3		
	8800	PALE	8	S	1919.0	1920.1	1.6	28.0			QL=6 ST=2 TYP=3

SOLAR RADIO EMISSION
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JUNE 1982

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
19	8800	SGMR	8	S	1919.0	1920.1	1.6	28.0			QL=6 ST=2 TYP=3
	1415	SGMR	8	S	1920.1	1920.3	.2	16.0			QL=6 ST=2 TYP=3
	2800	OTTA	1	S	1928.0	1930.2	4.0	6.6	3.3		
	410	SGMR	47	GB	1946.3	1948.1	16.3	139.0			QL=6 ST=2 TYP=5
	9400	HUAN	45	C	1947.3	1949.5	7.7	120.9	55.9		R
	4995	SGMR	47	GB	1948.0	1949.8	14.6	100.0			QL=6 ST=2 TYP=5
	2800	OTTA	4	S/F	1948.0	1950.1	12.0	82.0	31.4		
	245	SGMR	47	GB	1948.1	1948.3	14.5	270.0			QL=6 ST=2 TYP=5
	8800	SGMR	47	GB	1948.3	1949.6	14.3	130.0			QL=6 ST=2 TYP=5
	4995	PALE	47	GB	1948.5	1950.0	12.8	110.0			QL=6 ST=2 TYP=5
	8800	PALE	47	GB	1948.6	1949.6	12.7	169.0			QL=6 ST=2 TYP=5
	1415	SGMR	47	GB	1948.6	1949.8	14.0	110.0			QL=6 ST=2 TYP=5
	15400	SGMR	47	GB	1948.8	1949.6	13.8	100.0			QL=6 ST=2 TYP=5
	1415	PALE	47	GB	1948.8	1951.0	5.7	160.0			QL=6 ST=2 TYP=5
	2695	SGMR	47	GB	1949.0	1949.8	13.6	73.0			QL=6 ST=2 TYP=5
	15400	PALE	47	GB	1949.0	1949.8	8.3	130.0			QL=6 ST=2 TYP=5
	500	HIRA	45	C	1949.0	1951.8	5.0	60.0	20.0		WL
	410	PALE	47	GB	1949.1	1949.1	3.5	50.0			QL=6 ST=2 TYP=5
	2695	PALE	47	GB	1949.1	1949.8	6.2	80.0			QL=6 ST=2 TYP=5
	610	SGMR	47	GB	1949.3	1949.8	13.3	58.0			QL=6 ST=2 TYP=5
	610	PALE	47	GB	1949.6	1951.1	4.7	60.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	1949.8	1950.0	.5	110.0			QL=6 ST=2 TYP=5
	9400	HUAN	30	PBI	1955.0	1955.0	23.8	43.8	20.2		R
	9400	HUAN	2	S/F	1959.0	2001.0	3.4	5.2	2.8		0
	2800	OTTA	29	PBI	2000.0	2000.0	30.0	13.0	6.5		
	2695	PALE	47	GB	2007.1	2007.1	1.0	219.0			QL=6 ST=2 TYP=5
	410	PALE	47	GB	2007.1	2007.1	.4	50.0			QL=6 ST=2 TYP=5
	610	PALE	47	GB	2007.1	2007.1	.5	100.0			QL=6 ST=2 TYP=5
	1415	PALE	47	GB	2007.1	2007.1	.9	169.0			QL=6 ST=2 TYP=5
	4995	PALE	47	GB	2007.1	2007.1	2.7	219.0			QL=6 ST=2 TYP=5
	8800	PALE	47	GB	2007.1	2007.1	1.0	320.0			QL=6 ST=2 TYP=5
	15400	PALE	49	GB	2007.1	2007.1	1.0	520.0			QL=6 ST=2 TYP=6
	500	HIRA	45	C	2134.4	2134.6	1.5	160.0	15.0		WL
	9400	TYKW	21	GRF	2135.0	2147.0	100.0	4.0	2.0		
	3750	TYKW	5	S	2146.0	2147.7	17.0	5.0	1.5		
	9400	TYKW	45	C	2224.0	2225.0	5.0	7.0	3.0		
	2000	TYKW	20	GRF	2224.0	2240.0	45.0	1.5	.7		
	3750	TYKW	20	GRF	2225.0	2245.0	55.0	4.0	1.5		
	610	LEAR	8	S	2335.1	2335.1	.5	33.0			QL=6 ST=2 TYP=3
	9400	TYKW	21	GRF	2354.0	0019.0	265.0	8.0	4.0		
	3750	TYKW	28	PRE	2354.0	0019.0	25.0	7.0	3.0		
20	100	GORK	44	NS	0255.0E		420.0D		5.0		
	200	GORK	44	NS	0257.0E		418.0D		15.0		
	410	LEAR	43	NS	0403.0	0537.3	327.0D	21.0			QL=6 ST=2 TYP=1
	536	ONDR	44	NS	0619.0E	1314.0U	533.0D	57.0U			
	410	SGMR	43	NS	0930.0	1818.0		48.0			QL=6 ST=3 TYP=1
	245	SGMR	43	NS	0930.0	2259.1		420.0			QL=6 ST=2 TYP=1
	127	TORN	44	NS	1220.0E		200.0D		7.0		V1
	410	SGMR	43	NS	1454.0	1519.0		15.0			QL=6 ST=2 TYP=1
	200	HIRA	44	NS	1918.0E	0638.0	875.0D	290.0	110.0		WR
	100	HIRA	44	NS	1918.0E	1958.0	875.0D	2400.0	170.0		SR
	208	VORO	44	NS	2100.0E		360.0D		46.0		
	245	LEAR	43	NS	2321.0	0642.8	609.0D	300.0			QL=6 ST=2 TYP=1
	2000	TYKW	28	PRE	0002.0	0019.0	17.5	3.5	1.5		
	3750	TYKW	45	C	0019.0	0020.7	8.0	225.0	50.0		
	500	HIRA	45	C	0019.4	0020.3	1.0	130.0	30.0		WR
	2000	TYKW	5	S	0019.5	0020.6	18.5	230.0	40.0		
	9400	TYKW	45	C	0019.5	0020.7	13.5	106.0	18.0		
	1000	TYKW	5	S	0019.5	0021.3	20.5	106.0	25.0		
	17000	NOBE	1	S	0019.7	0020.6	10.0	54.0			R
	4995	PALE	47	GB	0019.8	0020.6	19.7	169.0			QL=6 ST=2 TYP=5
	2695	LEAR	47	GB	0019.8	0020.6	13.8	290.0			QL=6 ST=2 TYP=5
	8800	LEAR	47	GB	0019.8	0020.6	16.3	119.0			QL=6 ST=2 TYP=5
	1415	PALE	47	GB	0019.8	0020.6	11.0	200.0			QL=6 ST=2 TYP=5
	1415	LEAR	47	GB	0019.8	0020.6	13.5	200.0			QL=6 ST=3 TYP=5
	8800	PALE	47	GB	0019.8	0020.6	1.8	119.0			QL=6 ST=2 TYP=5
	4995	LEAR	47	GB	0019.8	0020.6	16.3	180.0			QL=6 ST=2 TYP=5
	2695	PALE	47	GB	0019.8	0020.6	13.0	300.0			QL=6 ST=2 TYP=5
	2930	VORO	3	S	0020.0	0022.0	10.0	269.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
20	610	LEAR	47	GB	0020.1	0020.3	11.9	50.0			QL=6 ST=2 TYP=5
	15400	LEAR	4	S/F	0020.1	0020.5	11.9	49.0			QL=6 ST=2 TYP=3
	610	PALE	47	GB	0020.3	0020.3	1.8	130.0			QL=6 ST=2 TYP=5
	410	LEAR	47	GB	0020.6	0020.6	.2	110.0			QL=6 ST=2 TYP=5
	410	PALE	47	GB	0020.6	0020.6	.2	169.0			QL=6 ST=2 TYP=5
	606	MANI	3	S	0021.2	0022.5	7.8	26.8	8.9		
	4995	MANI	3	S	0021.3	0022.3	7.7	172.8	57.6		
	1415	MANI	3	S	0021.4	0022.3	8.6	241.2	80.4		
	2695	MANI	3	S	0021.4	0022.3	8.6	399.6	133.2		
	8800	MANI	3	S	0021.4	0022.3	6.6	189.4	63.1		
	3750	TYKW	30	PBI	0028.0		45.0	24.0	10.0		
	2695	PENT	29	PBI	0029.0	0029.0	30.0	19.6	7.0		
	9400	TYKW	30	PBI	0033.0		38.0	12.0	6.0		
	2000	TYKW	30	PBI	0038.0		35.0	10.0	5.0		
	1000	TYKW	29	PBI	0040.0		25.0	4.0	1.0		
	9400	TYKW	5	S	0046.5	0047.4	3.5	3.0	1.0		
	500	HIRA	6	S	0046.9	0047.3	.6	250.0	110.0		O
	2695	PALE	8	S	0053.1	0053.5	.4D	27.0			QL=6 ST=2 TYP=3
	1000	TYKW	45	C	0105.0	0105.4	1.5	2.0	.7		
	9400	TYKW	5	S	0105.0	0105.4	3.0	23.0	6.0		
	9395	PEKG	3	S	0105.0	0105.4	4.0	19.3	6.0		
	4995	LEAR	8	S	0105.1	0105.1	1.0	7.0			QL=6 ST=2 TYP=3
	15400	LEAR	8	S	0105.1	0105.1	.9	8.0			QL=6 ST=2 TYP=3
	8800	LEAR	8	S	0105.1	0105.1	1.9	30.0			QL=6 ST=2 TYP=3
	2930	VORO	3	S	0110.0	0115.0	10.0	112.0			
	500	HIRA	48	C	0112.2	0113.0	19.0	22000.0	400.0		WL
	9400	TYKW	47	GB	0113.0	0113.5	5.0	560.0	50.0		
	2000	TYKW	5	S	0113.0	0113.5	17.0	170.0	30.0		
	1000	TYKW	5	S	0113.0	0113.6	17.0	236.0	48.0		
	3750	TYKW	5	S	0113.0	0113.6	9.0	104.0	2.0		
	35000	NAGO	5	S	0113.0	0113.0	3.0	75.0			
	208	VORO	4	S/F	0113.0	0113.0	1.0	200.0			
	17000	NOBE	47	GB	0113.0	0113.5	3.0	1320.0			R
	9395	PEKG	47	GB	0113.0	0113.5	7.0	594.0	36.2		
	2840	PEKG	3	S	0113.0	0133.5	20.5U	113.8	16.6		
	610	PALE	49	GB	0113.1	0113.3	16.4	1100.0			QL=6 ST=2 TYP=7
	15400	PALE	49	GB	0113.1	0113.3	2.0	1699.0			QL=6 ST=2 TYP=7
	610	LEAR	49	GB	0113.1	0113.3	19.2	880.0			QL=6 ST=2 TYP=7
	410	LEAR	49	GB	0113.1	0113.3	4.5	79000.0			QL=6 ST=2 TYP=7
	8800	PALE	49	GB	0113.1	0113.3	2.0	640.0			QL=6 ST=2 TYP=7
	8800	LEAR	49	GB	0113.1	0113.3	1.7	520.0			QL=6 ST=2 TYP=7
	4995	PALE	49	GB	0113.1	0113.3	2.9	130.0			QL=6 ST=2 TYP=7
	15400	LEAR	49	GB	0113.1	0113.3	1.9	1100.0			QL=6 ST=2 TYP=7
	1415	PALE	49	GB	0113.1	0113.5	11.0	300.0			QL=6 ST=2 TYP=7
	200	HIRA	8	S	0113.2	0113.3	.5	13000.0			WR
	2695	PENT	3	S	0113.2	0113.5	8.0	129.0	32.2		
	245	LEAR	49	GB	0113.3	0113.3	.3	200.0			QL=6 ST=2 TYP=7
	410	PALE	49	GB	0113.3	0113.3	1.0	98000.0			QL=6 ST=2 TYP=7
	1415	LEAR	49	GB	0113.3	0113.5	10.0	270.0			QL=6 ST=2 TYP=7
	4995	LEAR	49	GB	0113.3	0113.5	1.2	100.0			QL=6 ST=2 TYP=7
	2695	LEAR	49	GB	0113.3	0113.5	4.0	130.0			QL=6 ST=2 TYP=7
	2695	PALE	49	GB	0113.3	0113.5	4.0	130.0			QL=6 ST=2 TYP=7
	1415	MANI	47	GB	0114.5	0115.0	9.5	593.6	198.0		
	2695	MANI	3	S	0114.5	0115.2	5.5	230.8	77.0		
	606	MANI	47	GB	0114.8	0114.9	9.2	511.9	170.6		
	4995	MANI	3	S	0114.8	0115.0	3.2	166.0	55.3		
	8800	MANI	47	GB	0114.8	0115.1	2.7	631.4	210.5		
	3750	TYKW	30	PBI	0122.0		250.0	10.0	5.0		
	9400	TYKW	5	S	0123.0	0125.8	20.0	6.0	2.0		
	2000	TYKW	30	PBI	0130.0		180.0	8.0	4.0		
	1000	TYKW	30	PBI	0130.0		19.0	12.0	6.0		
	3750	TYKW	28	PRE	0133.0	0147.0	14.0	7.0	3.0		
	2930	VORO	47	GB	0145.0	0152.0	40.0	656.0D			
	2840	PEKG	47	GB	0146.0	0150.3	11.0	765.0	221.0		
	9395	PEKG	47	GB	0146.0	0150.3	8.0	2164.0	346.0		
	9400	TYKW	47	GB	0146.5	0150.3	13.5	1940.0	240.0		
	3750	TYKW	47	GB	0147.0	0150.3	20.0	1240.0	180.0		
	2000	TYKW	45	C	0147.0	0150.3	19.0	387.0	7.0		
	2695	PENT			0147.0	0150.0	5.0D	1230.0			
	1000	TYKW	45	C	0147.3	0147.4	1.5	7.0	1.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
20	4995	LEAR	49	GB	0147.3	0150.1	15.5	1800.0			QL=6 ST=2 TYP=6
	4995	PALE	49	GB	0147.3	0150.1	12.3	2000.0			QL=6 ST=2 TYP=6
	8800	LEAR	49	GB	0147.5	0150.1	46.6	2000.0			QL=6 ST=2 TYP=6
	2695	PALE	49	GB	0147.6	0150.1	14.5	770.0			QL=6 ST=2 TYP=6
	8800	PALE	49	GB	0147.6	0150.1	12.2	2699.0			QL=6 ST=2 TYP=6
	2695	LEAR	49	GB	0147.6	0150.1	42.0	770.0			QL=6 ST=2 TYP=6
	15400	LEAR	49	GB	0148.3	0150.1	32.7	1199.0			QL=6 ST=2 TYP=6
	4995	MANI	47	GB	0148.6	0151.5	38.4	1328.0	442.7		
	8800	MANI	47	GB	0148.6	0151.7	16.4	2525.6	841.9		
	500	HIRA	45	C	0148.6	0152.0	15.0	35.0	15.0		WL
	15400	PALE	49	GB	0148.8	0150.0	7.8	1699.0			QL=6 ST=2 TYP=6
	17000	NOBE	47	GB	0148.9	0150.1	4.1	1120.0			R
	35000	NAGO	5	S	0149.0	0150.0	3.0	335.0			
	2695	MANI	47	GB	0149.0	0151.4	39.0	3539.2	1179.7		
	1415	LEAR	47	GB	0149.1	0150.6	12.2	270.0			QL=6 ST=2 TYP=5
	1415	PALE	47	GB	0149.1	0150.6	9.7	290.0			QL=6 ST=2 TYP=5
	410	LEAR	47	GB	0149.3	0149.3	4.3	200.0			QL=6 ST=2 TYP=5
	610	LEAR	47	GB	0149.3	0151.3	9.3	91.0			QL=6 ST=2 TYP=5
	610	PALE	47	GB	0149.6	0151.5	7.4	100.0			QL=6 ST=2 TYP=5
	410	PALE	8	S	0150.0	0150.3	1.6	43.0			QL=6 ST=2 TYP=3
	1415	MANI	47	GB	0150.3	0152.1	15.7	612.2	204.1		
	606	MANI	4	S/F	0150.5	0153.0	6.5	69.7	23.2		
	35000	NAGO	29	PBI	0152.0	0152.0	80.0	43.0			
	17000	NOBE	29	PBI	0153.0	0153.0	36.0	54.0			O
	9395	PEKG	30	PBI	0154.0		32.0D	141.0			
	2840	PEKG	30	PBI	0157.0		82.0D	84.6			
	9400	TYKW	30	PBI	0200.0		110.0	22.0	7.0		
	9400	TYKW	5	S	0201.8	0202.0	1.0	3.0	1.0		
	2000	TYKW	30	PBI	0206.0		110.0	11.0	5.5		
	3750	TYKW	30	PBI	0207.0		110.0	17.0	8.0		
	2840	PEKG	46	C	0207.0	0215.0	27.0	69.6	24.5		
	3750	TYKW	45	C	0207.5	0215.0	19.5	39.0	12.0		
	2000	TYKW	45	C	0207.5	0217.5	11.5	30.0	10.0		
	1000	TYKW	30	PBI	0213.0		145.0	6.0	3.0		
	9400	TYKW	5	S	0213.0	0215.3	9.0	5.0	2.0		
	1000	TYKW	45	C	0214.0	0215.0	8.0	4.0	1.5		
	245	LEAR	47	GB	0216.0	0216.1	2.3	119.0			QL=6 ST=2 TYP=5
	2000	TYKW	30	PBI	0219.0		60.0	4.0	2.0		
	1000	TYKW	45	C	0222.5	0226.2	9.0	5.0	1.0		
	3750	TYKW	29	PBI	0227.0		10.0	4.0	2.0		
	2000	TYKW	45	C	0238.0	0253.1	20.0	20.0	5.0		
	3750	TYKW	21	GRF	0239.0	0246.0	40.0	7.0	3.0		
	1000	TYKW	21	GRF	0240.0	0248.0	70.0	5.0	2.5		
	1000	TYKW	45	C	0246.3	0246.6	.6	6.0	1.5		
	3750	TYKW	45	C	0251.0	0252.3	3.0	18.0	7.0		
	9400	TYKW	5	S	0251.0	0252.8	7.0	17.0	6.0		
	1000	TYKW	5	S	0251.0	0253.1	9.0	9.0	2.0		
	9395	PEKG	45	C	0251.0	0252.5	7.0	14.1	7.3		
	15400	LEAR	4	S/F	0251.0	0252.8	5.0	11.0			QL=6 ST=2 TYP=3
	2840	PEKG	45	C	0251.0	0253.0	6.0	23.4	5.4		
	410	LEAR	49	GB	0252.0	0252.8	.8D	540.0			QL=6 ST=2 TYP=6
	610	LEAR	47	GB	0252.0	0253.0	1.1	180.0			QL=6 ST=2 TYP=5
	1415	LEAR	4	S/F	0252.0	0253.1	3.0	13.0			QL=6 ST=2 TYP=3
	8800	LEAR	8	S	0252.1	0252.3	1.0	20.0			QL=6 ST=2 TYP=3
	4995	LEAR	8	S	0252.1	0252.3	1.0	20.0			QL=6 ST=2 TYP=3
	2695	LEAR	8	S	0252.8	0253.1	.3D	13.0			QL=6 ST=2 TYP=3
	4995	MANI	4	S/F	0253.0	0253.8	2.7	33.2	11.1		
	606	MANI	4	S/F	0253.2	0254.1	1.7	56.3	18.8		
	2695	MANI	4	S/F	0253.3	0254.1	2.3	34.2	11.4		
	1415	MANI	4	S/F	0253.4	0254.3	2.3	37.1	12.4		
	8800	MANI	4	S/F	0253.5	0254.1	1.5	68.9	22.9		
	3750	TYKW	29	PBI	0254.0		12.0	5.0	2.0D		
	2000	TYKW	29	PBI	0258.0		25.0	5.0	2.5		
	9400	TYKW	5	S	0317.6	0318.0	3.0	3.0	1.0		
	2950	GORK	21	GRF	0320.3E	0328.0	57.0D	10.0			
	650	GORK	23	GRF	0321.0E	0838.2	384.0D	4.0			
	3750	TYKW	20	GRF	0322.0	0335.0	30.0	4.0	2.0		
	9400	TYKW	5	S	0327.0	0327.3	1.0	11.0	3.0		
	9100	GORK	1	S	0327.0	0327.3	.8	18.0	9.0		
	9100	GORK	1	S	0353.7	0354.0	.8	6.0	3.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
20	9400	TYKW	45	C	0353.8	0354.0	1.0	7.0	2.0		
	9400	TYKW	28	PRE	0359.5	0401.0	3.0	5.0	3.5		
	650	GORK	41	F	0359.6	0400.0	6.4	49.0			
	650	GORK			0359.6	0403.0		290.0			
	610	LEAR	47	GB	0359.8	0400.0	1.3	270.0			QL=6 ST=2 TYP=5
	1000	TYKW	45	C	0400.0	0401.0	2.0	91.0	5.0		
	2000	TYKW	28	PRE	0400.0	0401.0	2.5	4.0	1.0		
	3750	TYKW	28	PRE	0400.0	0402.5	2.5	3.0	1.5		
	950	GORK	28	PRE	0400.6	0401.0	1.1	30.0			
	1415	LEAR	8	S	0400.6	0401.0	.5	40.0			QL=6 ST=2 TYP=3
	9100	GORK	3	S	0400.6	0403.0	7.6	460.0			
	2840	PEKG	3	S	0402.0	0403.0	7.0	390.0D	43.3D		
	606	MANI	3	S	0402.3	0403.2	3.7	482.4	160.8		
	8800	MANI	3	S	0402.4	0403.3	1.8	432.8	144.3		
	610	LEAR	49	GB	0402.5	0402.8	1.8	610.0			QL=6 ST=2 TYP=6
	950	GORK	4	S/F	0402.5	0402.9	4.7	474.0			
	1000	TYKW	47	GB	0402.5	0403.0	6.5	790.0	35.0		
	9400	TYKW	47	GB	0402.5	0403.0	3.5	670.0	60.0		
	1415	MANI	47	GB	0402.5	0403.1	4.5	2286.7	762.2		
	2000	TYKW	5	S	0402.5	0403.1	4.5	370.0	37.0		
	3750	TYKW	5	S	0402.5	0403.1	2.5	240.0	40.0		
	610	PALE	49	GB	0402.6	0402.8	.5	630.0			QL=3 ST=2 TYP=6
	1415	LEAR	49	GB	0402.6	0403.0	2.7	700.0			QL=6 ST=2 TYP=6
	17000	NOBE	3	S	0402.6	0403.0	.9	573.0			R
	15400	LEAR	49	GB	0402.6	0403.0	1.2	680.0			QL=6 ST=2 TYP=6
	8800	LEAR	47	GB	0402.6	0403.0	2.5	490.0			QL=6 ST=2 TYP=5
	4995	LEAR	47	GB	0402.6	0403.0	1.2	330.0			QL=6 ST=2 TYP=5
	4995	ATHN	47	GB	0402.6	0403.3	6.0	239.0			QL=6 ST=2 TYP=5
	2695	ATHN	47	GB	0402.6	0403.3	6.0	490.0			QL=6 ST=2 TYP=5
	8800	ATHN	47	GB	0402.6	0403.3	6.0	400.0			QL=6 ST=2 TYP=5
	1415	ATHN	49	GB	0402.6	0403.3	6.0	520.0			QL=2 ST=2 TYP=6
	6100	KISV	8	S	0402.7	0403.3	1.0	124.0			
	1415	PALE	49	GB	0402.8	0403.0	1.0	790.0			QL=3 ST=2 TYP=6
	2695	LEAR	49	GB	0402.8	0403.0	1.3	540.0			QL=6 ST=2 TYP=6
	2695	PALE	47	GB	0402.8	0403.0	.5	440.0			QL=3 ST=2 TYP=5
	2950	GORK	3	S	0402.8	0403.0	1.5	156.0			
	410	LEAR	47	GB	0402.8	0403.1	.5	200.0			QL=6 ST=2 TYP=5
	410	PALE	47	GB	0403.0	0403.1	.3	189.0			QL=3 ST=2 TYP=5
	4995	MANI	47	GB	0403.0	0403.1	3.0	580.1	193.5		
	2695	MANI	47	GB	0403.0	0403.2	3.5	707.8	235.9		
	17000	NOBE	29	PBI	0403.5	0403.5	4.0	26.0			0
	6100	KISV	29	PBI	0403.7	0403.8	5.0	19.0			
	9400	TYKW	29	PBI	0406.0		12.0	4.0	2.0		
	2000	TYKW	29	PBI	0407.0		11.0	7.0	3.0		
	1000	TYKW	29	PBI	0409.0		10.0	2.0	1.0		
	3750	TYKW	5	S	0434.4	0434.7	1.0	1.5	.5		
	3750	TYKW	20	GRF	0440.0	0454.0	30.0	3.0	1.5		
	2000	TYKW	21	GRF	0443.0	0618.0	250.0	4.0	2.0		
	9400	TYKW	20	GRF	0449.0	0457.0	30.0	5.0	2.0		
	1000	TYKW	8	S	0452.3	0452.4	.2	20.0	5.0		
	1000	TYKW	21	GRF	0533.0	0705.0	185.0	4.0	2.0		
	1000	TYKW	42	SER	0533.7	0534.8	1.5	48.0	4.0		
	610	LEAR	47	GB	0551.6	0551.6	.2	280.0			QL=6 ST=2 TYP=5
	1000	TYKW	42	SER	0552.0	0552.7	1.0	14.0	1.5		
	9400	TYKW	21	GRF	0558.0	0701.0	180.0	10.0	4.0		
	9400	TYKW	45	C	0559.0	0559.4	1.5	5.0	2.0		
	500	HIRA	8	S	0559.0	0559.3	.4	2500.0	1000.0		0
	9100	GORK	22	GRF	0559.2	0604.4	10.5	10.0			
	610	LEAR	47	GB	0559.3	0559.3	.3	300.0			QL=6 ST=2 TYP=5
	8800	LEAR	8	S	0559.3	0559.3	.5	13.0			QL=6 ST=2 TYP=3
	3750	TYKW	21	GRF	0603.0	0630.0	150.0	5.0	3.0		
	2950	GORK	21	GRF	0603.0	0703.0	102.0	5.0			
	9400	TYKW	45	C	0603.5	0608.3	8.0	12.0	3.0D		
	8800	LEAR	4	S/F	0604.1	0604.3	2.2	13.0			QL=6 ST=2 TYP=3
	4995	LEAR	8	S	0604.6	0605.1	.5	4.0			QL=6 ST=2 TYP=3
	1000	TYKW	42	SER	0605.0	0605.3	1.5	12.0	1.0		
	610	LEAR	47	GB	0608.0	0608.1	.1	63.0			QL=6 ST=2 TYP=5
	9395	PEKG	41	F	0631.0	0632.5	10.0	50.1	9.9		
	9395	PEKG			0631.0	0636.5		35.4			
	9400	TYKW	45	C	0631.8	0633.0	9.2	50.0	15.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
20	3750	TYKW	45	C	0632.0	0632.3	1.5	5.0	1.5		
	8400	BERN	46	C	0632.0	0632.4	15.0	69.0			
	11800	BERN	46	C	0632.0	0632.4	15.0U	48.0			
	4995	LEAR	4	S/F	0632.1	0632.3	8.7	28.0			QL=6 ST=2 TYP=3
	9100	GORK	45	C	0632.1	0632.3	1.2	60.0			
	8800	LEAR	47	GB	0632.1	0632.3	8.0	62.0			QL=6 ST=2 TYP=5
	9100	GORK			0632.1	0633.0		44.0			
	1000	TYKW	42	SER	0632.2	0632.3	1.5	3.0	.5		
	15000	KISV	2	S/F	0632.2	0632.4	2.0	35.0			
	15400	LEAR	8	S	0632.3	0632.3	1.0	17.0			QL=6 ST=2 TYP=3
	8800	ATHN	47	GB	0632.3	0632.6	9.3	55.0			QL=6 ST=2 TYP=5
	4995	ATHN	4	S/F	0632.3	0632.6	9.3	28.0			QL=6 ST=2 TYP=3
	9100	GORK	30	PBI	0633.2	0633.2	17.8	26.0			
	500	HIRA	42	SER	0633.2	0633.3	3.4	270.0			WR
	650	GORK	46	C	0633.3	0636.2	4.8	60.0			
	650	GORK			0633.3	0637.8U		60.0D			
	536	ONDR	41	F	0633.4	0633.8	13.0	42.0			
	610	LEAR	49	GB	0633.5	0633.6	4.5	650.0			QL=6 ST=3 TYP=6
	3750	TYKW	5	S	0634.0	0636.8	12.0	8.0	3.0		
	1000	TYKW	45	C	0634.0	0637.9	6.0	115.0	4.0		
	950	GORK	46	C	0634.7	0635.1	3.3	25.0			
	950	GORK			0634.7	0635.7		38.0			
	950	GORK			0634.7	0636.3		23.0			
	808	ONDR	41	F	0634.9	0637.9	3.7	69.0			
	2000	TYKW	45	C	0635.0	0636.7	7.0	4.0	1.5		
	2840	PEKG	1	S	0635.0	0637.2	5.0	6.1	2.2		
	430	KRAK	42	SER	0635.0	0840.8	197.0	160.0			
	9100	GORK	2	S/F	0635.8	0636.6	2.4	26.0			
	2950	GORK	1	S	0635.9	0636.8	2.5	2.5	1.2		
	810	KRAK	42	SER	0637.0	0638.0	11.0	640.0			
	9400	TYKW	29	PBI	0641.0		6.0	5.0	2.0		
	1000	TYKW	42	SER	0642.0	0645.5	4.0	8.0	.4		
	1000	TYKW	45	C	0652.0	0653.4	3.0	5.0	1.0		
	3750	TYKW	45	C	0652.0	0701.5	11.0	11.0	3.0		
	2000	TYKW	21	GRF	0652.0	0710.0	100.0	4.0	2.0		
	950	GORK	1	S	0653.0	0653.1	.8	3.0			
	650	GORK	1	S	0653.0	0653.4	.6	3.0	1.5		
	1000	TYKW	45	C	0656.0	0705.1	10.0	88.0	2.0		
	950	GORK	2	S/F	0657.0	0657.4	1.6	7.0			
	650	GORK	2	S/F	0659.7	0700.3	.7	6.0			
	2000	TYKW	45	C	0659.8	0700.5	4.0	7.0	2.0		
	2950	GORK	1	S	0700.0	0701.5	2.4	3.8	1.9		
	3750	TYKW	29	PBI	0703.0		45.0	4.0	2.0		
	536	ONDR	8	S	0722.5	0722.6	.2	65.0			
	6100	KISV	2	S/F	0755.7	0755.9	1.0	4.0			
	2950	GORK	20	GRF	0803.0	0809.0	17.1	2.5	1.2		
	1000	TYKW	42	SER	0812.0	0813.7	4.0	120.0	3.0		
	808	ONDR	7	C	0812.3	0813.9	2.6	55.0	32.0		
	810	KRAK	8	S	0813.6	0813.6	.2	110.0			
	950	GORK	4	S/F	0813.6	0813.7	.7	45.0			
	930	BORD	41	F	0813.6	0813.9	1.0	157.0	3.0		
	1000	TYKW	8	S	0824.2	0824.3	.2	6.0	1.5		
	610	LEAR	47	GB	0836.1	0836.3	.2	150.0			QL=6 ST=2 TYP=5
	536	ONDR	4	S/F	0841.0	0841.3	1.4	23.0	20.0		
	245	LEAR	8	S	0841.1	0841.1	.2	23.0			QL=6 ST=2 TYP=3
	410	LEAR	47	GB	0841.1	0841.1	.2	74.0			QL=6 ST=2 TYP=5
	610	LEAR	8	S	0841.1	0841.1	.2	13.0			QL=6 ST=2 TYP=3
	1000	TYKW	8	S	0843.7	0843.8	.2	33.0	7.0		
	2950	GORK	20	GRF	0906.0	0945.0	39.0D	6.2			
	930	BORD	41	F	0936.0	0936.6	.7	28.0	1.0		
	430	KRAK	8	S	1050.9	1051.0	.4	55.0			
	410	SGMR	47	GB	1051.3	1051.5	.8	97.0			QL=6 ST=2 TYP=5
	245	SGMR	47	GB	1051.5	1051.8	.5	61.0			QL=6 ST=2 TYP=5
	2800	OTTA	23	GRF	1100.0	1345.0	320.0	15.4	7.7		
	9400	HUAN	3	S	1158.9	1159.7	4.1	272.1	67.3		R
	15000	KISV	4	S/F	1159.5	1200.0	4.0	270.0			
	8800	SGMR	47	GB	1159.5	1200.3	2.8	310.0			QL=6 ST=2 TYP=5
	6100	KISV	4	S/F	1159.5	1200.4	4.0	184.0			
	15400	SGMR	47	GB	1159.6	1200.0	7.2	300.0			QL=6 ST=2 TYP=5
	410	SGMR	47	GB	1159.6	1200.1	1.9	90.0			QL=6 ST=2 TYP=5

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
20	4995	SGMR	47 GB	1159.6	1200.3	2.5	230.0			QL=6 ST=2 TYP=5
	8800	ATHN	47 GB	1159.6	1200.6	7.7	260.0			QL=6 ST=2 TYP=5
	610	SGMR	49 GB	1159.8	1200.1	.8	3399.0			QL=6 ST=2 TYP=6
	8400	BERN	4 S/F	1159.8	1200.3	5.0	323.0			
	11800	BERN	4 S/F	1159.8	1200.3	5.0	251.0			
	19600	BERN	4 S/F	1159.8	1200.3	5.0	217.0			
	2650	DWIN	1 S	1200.0	1200.0	1.0	40.0	20.0		
	430	KRAK	8 S	1200.0	1200.0	.2	140.0			
	810	KRAK	8 S	1200.0	1200.0	.2	60.0			
	245	SGMR	47 GB	1200.0	1200.1	.5	51.0			QL=6 ST=2 TYP=5
	930	BORD	45 C	1200.0	1200.1	2.0	91.0	8.0		
	2695	SGMR	8 S	1200.0	1200.3	1.0	50.0			QL=6 ST=2 TYP=3
	2800	OTTA	3 S	1200.0	1200.3	3.0	51.0	17.0		
	35000	BERN	4 S/F	1200.0	1200.3	5.0	154.0			
	1415	SGMR	8 S	1200.1	1200.1	.5	36.0			QL=6 ST=2 TYP=3
	2695	ATHN	4 S/F	1200.1	1200.6	4.5	43.0			QL=6 ST=2 TYP=3
	4995	ATHN	47 GB	1200.1	1200.8	7.4	219.0			QL=6 ST=2 TYP=5
	1415	ATHN	4 S/F	1200.3	1200.6	3.3	21.0			QL=6 ST=2 TYP=3
	9400	HUAN	29 PBI	1203.0	1203.0	21.8	13.7	6.0		0
	6100	KISV	29 PBI	1203.5	1203.7	8.5	18.0			
	930	BORD	8 S	1252.6	1252.6	.1	20.0	1.0		
	410	SGMR	47 GB	1338.8	1339.1	.3	280.0			QL=6 ST=2 TYP=5
	245	SGMR	8 S	1449.6	1449.8	.7	36.0			QL=6 ST=2 TYP=3
	410	SGMR	8 S	1449.8	1450.0	.3	19.0			QL=6 ST=2 TYP=3
	410	SGMR	8 S	1453.5	1453.6	.3	28.0			QL=6 ST=2 TYP=3
	245	SGMR	8 S	1453.6	1453.8	.9	30.0			QL=6 ST=2 TYP=3
	9400	HUAN	4 S/F	1542.2	1543.4	3.5	41.1	16.3		0
	8800	ATHN	4 S/F	1542.5	1543.6	2.8	35.0			QL=6 ST=2 TYP=3
	8800	SGMR	47 GB	1542.8	1543.1	1.0	53.0			QL=6 ST=2 TYP=5
	15400	SGMR	47 GB	1542.8	1543.1	.5	73.0			QL=6 ST=2 TYP=5
	8400	BERN	3 S	1543.0	1543.2	4.0	40.0			
	11800	BERN	3 S	1543.0	1543.2	4.0	85.0			
	19600	BERN	3 S	1543.0	1543.3	4.0U	27.0			
	9400	HUAN	29 PBI	1545.7	1545.7	19.1	3.4	1.9		0
	2800	OTTA	21 GRF	1700.0	1735.0	310.0	24.2	8.6		
	9400	HUAN	20 GRF	1703.5	1716.0	112.1	27.4	16.6		0
	2800	OTTA	40 F	1705.0	1707.8	22.0	18.0			
	4995	SGMR	20 GRF	1705.6	1707.6	16.5	32.0			QL=6 ST=2 TYP=2
	930	BORD	46 C	1706.5	1708.5	5.5	7.0	3.0		
	8800	PALE	4 S/F	1706.8	1707.5	20.5	34.0			QL=6 ST=2 TYP=3
	2695	PALE	4 S/F	1706.8	1707.6	12.3	33.0			QL=6 ST=2 TYP=3
	4995	PALE	4 S/F	1706.8	1707.8	20.5	37.0			QL=6 ST=2 TYP=3
	2695	SGMR	20 GRF	1707.1	1707.6	15.0	24.0			QL=6 ST=2 TYP=2
	8800	SGMR	20 GRF	1707.1	1708.3	15.0	20.0			QL=6 ST=2 TYP=2
	610	SGMR	4 S/F	1707.3	1707.8	14.8	24.0			QL=6 ST=2 TYP=3
	1415	PALE	47 GB	1707.3	1708.3	1.3	80.0			QL=6 ST=2 TYP=5
	1415	SGMR	20 GRF	1707.3	1708.3	14.8	87.0			QL=6 ST=2 TYP=2
	15400	PALE	47 GB	1708.8	1709.1	18.5	27.0			QL=6 ST=2 TYP=5
	245	SGMR	47 GB	1714.8	1715.0	7.3	58.0			QL=6 ST=2 TYP=5
	245	PALE	47 GB	1717.6	1718.0	.4	160.0			QL=6 ST=2 TYP=5
	930	BORD	46 C	1722.0	1724.8	5.0	11.0	4.0		
	1415	SGMR	4 S/F	1723.5	1725.8	2.3	49.0			QL=6 ST=2 TYP=3
	610	SGMR	8 S	1755.1	1755.5	1.7	20.0			QL=6 ST=2 TYP=3
	245	SGMR	4 S/F	1755.1	1756.1	2.2	20.0			QL=6 ST=2 TYP=3
	410	SGMR	8 S	1755.8	1756.1	1.5	19.0			QL=6 ST=2 TYP=3
	9400	HUAN	2 S/F	2039.6	2043.0	6.6	15.4	12.9		R
	2800	OTTA	20 GRF	2040.0	2042.0	25.0	8.4	3.8		
	4995	SGMR	4 S/F	2040.1	2042.0	6.7	15.0			QL=6 ST=2 TYP=3
	2695	SGMR	4 S/F	2040.5	2042.0	3.8	18.0			QL=6 ST=2 TYP=3
	8800	SGMR	20 GRF	2041.1	2044.1	3.7	26.0			QL=6 ST=2 TYP=2
	1415	SGMR	4 S/F	2042.0	2042.3	4.8	13.0			QL=6 ST=2 TYP=3
	9400	HUAN	29 PBI	2046.2	2046.2	18.8	10.3	2.4		0
	2000	TYKW	21 GRF	2058.0E	2122.0	72.0D	5.0	2.5D		
	3750	TYKW	21 GRF	2059.0E	2059.0U	71.0D	6.0D	3.0D		
	3750	TYKW	20 GRF	2110.0	2120.0	60.0	6.0	3.0		
	9400	TYKW	20 GRF	2115.0	2122.0	7.0U	4.0	1.5		
	2000	TYKW	45 C	2158.0	2159.1	2.0	2.0	.7		
	1000	TYKW	21 GRF	2200.0	2307.0	180.0	8.0	4.0		
	9400	TYKW	45 C	2223.0	2225.8	15.0	70.0	27.0		
	3750	TYKW	21 GRF	2223.0	2255.0	120.0	19.0	9.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
20	3750	TYKW	45	C	2225.0	2225.8	20.0	34.0	7.0		
	2000	TYKW	21	GRF	2225.0	2310.0	125.0	8.0	4.0		
	2800	OTTA	21	GRF	2225.0	2315.0	155.0D	22.2			
	8800	SGMR	47	GB	2225.3	2225.8	3.0	70.0			QL=6 ST=2 TYP=5
	4995	SGMR	8	S	2225.3	2225.8	1.8	48.0			QL=6 ST=2 TYP=3
	2800	OTTA	3	S	2225.3	2226.0	1.5	16.2	8.1		
	15400	SGMR	8	S	2225.5	2225.8	.3	40.0			QL=6 ST=2 TYP=3
	2000	TYKW	45	C	2225.5	2225.9	20.0	10.0	2.5		
	17000	NOBE	1	S	2225.5	2225.9	12.0	28.0			R
	2695	SGMR	8	S	2225.6	2225.8	.5	28.0			QL=6 ST=2 TYP=3
	500	HIRA	41	F	2226.3	2226.7	3.0	55.0	15.0		WL
	1000	TYKW	45	C	2227.0	2228.0	2.0	7.0	.7		
	1000	TYKW	45	C	2232.3	2234.0	3.0	5.0	.7		
	9400	TYKW	30	PBI	2238.0		80.0	16.0	8.0		
	9400	TYKW	21	GRF	2240.0	2257.0	65.0	10.0	5.0		
	3750	TYKW	5	S	2249.0	2250.7	3.0	2.0	1.0		
	3750	TYKW	20	GRF	2305.0	2317.8	35.0	7.0	2.5		
	2000	TYKW	5	S	2316.0	2317.8	4.0	4.0	1.5		
	1000	TYKW	45	C	2342.0	2343.3	3.0	7.0	2.5		
	1000	TYKW	29	PBI	2345.0		45.0	2.0	1.0		
21	200	GORK	44	NS	0300.0E		556.0D	130.0			
	100	GORK	44	NS	0302.0E		563.0D		10.0		
	410	LEAR	43	NS	0525.6	0642.8	244.4D	150.0			QL=6 ST=2 TYP=1
	260	ONDR	44	NS	0545.0E	0810.0U	518.0D	26.0U			
	610	LEAR	43	NS	0559.8	0639.0	78.3	119.0			QL=6 ST=2 TYP=1
	127	TORN	44	NS	0600.0E	0915.2	580.0D	260.0	22.0		V1
	204	IZMI	44	NS	0600.0E		360.0D	200.0			
	430	KRAK	44	NS	0700.0E	0844.9	360.0D	95.0			
	29	UPIC	43	NS	0841.7	1612.7	540.5				
	410	SGMR	43	NS	0930.0	1612.5	869.0D	200.0			QL=6 ST=2 TYP=1
	245	SGMR	43	NS	0930.0	1957.3		500.0			QL=6 ST=3 TYP=1
	410	PALE	43	NS	1628.0	1805.0	749.0D	119.0			QL=6 ST=2 TYP=1
	245	PALE	43	NS	1628.0	2308.8	749.0D	410.0			QL=6 ST=2 TYP=1
	245	PALE	43	NS	1630.0	0321.6	736.0D	980.0			QL=6 ST=2 TYP=1
	200	HIRA	44	NS	1918.0E	0238.0	875.0D	750.0	225.0		SR
	208	VORO	44	NS	2100.0E		360.0D		139.0		
	245	LEAR	43	NS	2321.0	0433.1	609.0D	930.0			QL=6 ST=2 TYP=1
	410	LEAR	43	NS	2321.0	0516.0	609.0D	26.0			QL=6 ST=2 TYP=1
	3750	TYKW	5	S	0045.0	0048.0	7.0	1.5	.5		
	2840	PEKG	45	C	0106.0	0113.5	29.0	41.0	17.1		
	2840	PEKG			0106.0	0123.6		48.2			
	3750	TYKW	45	C	0108.0	0123.5	22.0	50.0	14.0		RAIN
	9400	TYKW	45	C	0110.0	0113.6	30.0	28.0	10.0U		RAIN
	2000	TYKW	45	C	0110.0	0114.2	22.0	25.0	9.0		
	2000	TYKW			0110.0	0123.8		25.0			
	2000	TYKW	21	GRF	0110.0	0624.0U	480.0D	20.0U	10.0D		
	9395	PEKG	45	C	0110.0	0113.6	25.0	27.3	11.8		
	2930	VORO	42	SER	0110.0	0122.0	25.0	65.0			
	2695	PENT	23	GRF	0110.0	0126.0	40.0D	16.3			
	9395	PEKG			0110.0	0127.4		31.9			
	35000	NAGO	20	GRF	0110.0	0130.0	200.0	30.0			
	1415	MANI	22	GRF	0111.3	0122.2	17.7	46.9	15.6		
	2695	MANI	22	GRF	0111.3	0123.8	18.7	71.3	23.8		
	4995	LEAR	47	GB	0111.5	0113.5	8.1	59.0			QL=6 ST=2 TYP=5
	1000	TYKW	45	C	0112.0	0122.3	18.0	77.0	7.0		
	8800	LEAR	4	S/F	0112.1	0113.6	5.7	38.0			QL=6 ST=2 TYP=3
	4995	PALE	47	GB	0112.5	0113.5		58.0			QL=6 ST=3 TYP=5
	2695	LEAR	4	S/F	0112.6	0113.5	7.0	34.0			QL=6 ST=2 TYP=3
	2695	PENT	3	S	0112.7	0113.5	3.0	26.6	13.0		
	1415	LEAR	4	S/F	0113.0	0114.1	6.6	20.0			QL=6 ST=2 TYP=3
	2695	PALE	8	S	0113.3	0113.5		30.0			QL=6 ST=3 TYP=3
	610	LEAR	8	S	0117.3	0117.3	.2	41.0			QL=6 ST=2 TYP=3
	2695	PENT	3	S	0120.0	0120.8	5.0	21.2	7.0		
	1415	PALE	8	S	0121.6	0122.3	1.4	32.0			QL=6 ST=2 TYP=3
	1415	LEAR	4	S/F	0121.6	0122.3	2.7	29.0			QL=6 ST=2 TYP=3
	17000	NOBE	20	GRF	0122.1	0130.9	39.0	29.0			0
	2695	LEAR	4	S/F	0122.6	0123.8	4.2	29.0			QL=6 ST=2 TYP=3
	500	HIRA	3	S	0123.1	0123.4	1.0	12.0	7.0		WL
	2695	PALE	8	S	0123.1	0123.6	1.0	33.0			QL=6 ST=2 TYP=3

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
21	4995	PALE	8	S	0123.1	0123.6	1.0	31.0			QL=6 ST=2 TYP=3
	4995	LEAR	4	S/F	0123.1	0123.8	8.7	24.0			QL=6 ST=2 TYP=3
	410	LEAR	4	S/F	0123.3	0125.5	3.8	21.0			QL=6 ST=2 TYP=3
	8800	LEAR	4	S/F	0123.5	0124.0	10.5	20.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0124.0	0124.1	.1	2.0			QL=6 ST=2 TYP=3
	15400	PALE	20	GRF	0124.3	0131.1	12.8	50.0			QL=6 ST=2 TYP=2
	15400	LEAR	4	S/F	0125.5	0127.1	8.5	31.0			QL=6 ST=2 TYP=3
	1000	TYKW	29	PBI	0130.0		40.0	2.0	1.0D		
	3750	TYKW	29	PBI	0130.0		35.0U	15.0	7.0U		
	2000	TYKW	29	PBI	0132.0		35.0	8.0	4.0		
	9400	TYKW	29	PBI	0140.0		15.0U	10.0U	6.0U		
	15400	PALE	8	S	0142.3	0143.3	1.0D	30.0			QL=6 ST=2 TYP=3
	1000	TYKW	21	GRF	0215.0	0625.0U	410.0D	8.0U	4.0D		
	1000	TYKW	45	C	0238.0	0242.7	6.0	8.0	2.0		
	3750	TYKW	21	GRF	0240.0	0622.0U	380.0D	38.0U	13.0D		
	9400	TYKW	20	GRF	0245.0	0300.0	90.0	7.0	3.0		
	3750	TYKW	45	C	0246.0	0247.7	25.0	11.0	3.0		
	3750	TYKW			0246.0	0251.9		11.0			
	2840	PEKG	1	S	0247.0	0247.7	2.0	7.4	1.7		
	9395	PEKG	3	S	0247.0	0247.7	3.0	14.7	5.2		
	8800	LEAR	4	S/F	0247.5	0247.6	5.1	21.0			QL=6 ST=2 TYP=3
	2000	TYKW	5	S	0247.5	0247.8	1.5	3.0	1.0		
	4995	LEAR	8	S	0248.0	0248.1	.1	10.0			QL=6 ST=2 TYP=3
	2695	LEAR	4	S/F	0248.0	0248.6	4.6	10.0			QL=6 ST=2 TYP=3
	2000	TYKW	5	S	0251.0	0251.8	3.0	3.0	1.0		
	2000	TYKW	5	S	0301.0	0305.0U	15.0	3.0D	1.0D		
	3750	TYKW	45	C	0318.0	0351.7	65.0	19.0	6.0		
	2000	TYKW	5	S	0320.0	0321.0	3.0	2.0	.7		
	9400	TYKW	20	GRF	0320.0U	0340.0U	70.0U	12.0U	6.0U		RAIN
	2950	GORK	21	GRF	0324.9	0701.4	516.0D	42.0			
	1000	TYKW	45	C	0325.0	0325.2	2.0	2.0	.5		
	2000	TYKW	5	S	0325.0	0325.5	2.0	2.5	1.0		
	17000	NOBE	20	GRF	0327.1	0454.8	108.0D	35.0			0
	2000	TYKW	20	GRF	0332.0	0352.0	45.0	3.0	1.5		
	9100	GORK	21	GRF	0336.0	0642.9	317.0	39.0			
	500	HIRA	41	F	0432.0	0440.1	10.0	25.0	4.0		MR
	3750	TYKW	45	C	0433.0	0436.2	12.0	11.0	3.0		
	2000	TYKW	45	C	0435.0	0436.3	12.0	13.0	3.0		
	650	GORK	46	C	0435.0	0436.8	8.0	170.0			
	650	GORK			0435.0	0438.1		14.0			
	650	GORK			0435.0	0440.3		13.0			
	1000	TYKW	45	C	0435.7	0437.9	6.0	47.0	5.0		
	950	GORK	4	S/F	0435.8	0437.9	6.2	3.7			
	2950	GORK	1	S	0436.0	0436.2	.9	7.6			
	610	LEAR	8	S	0436.6	0438.1	1.5D	18.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0438.5	0438.6	.1	33.0			QL=6 ST=2 TYP=3
	9400	TYKW	21	GRF	0440.0	0730.0	260.0D	22.0U	14.0D		
	2950	GORK	3	S	0444.3	0445.1	1.8	19.4			
	9395	PEKG	45	C	0446.0	0450.0	24.0	27.0	10.6		
	9395	PEKG			0446.0	0454.8		35.1			
	15000	KISV			0446.8	0450.3		24.0			
	15000	KISV	45	C	0446.8	0455.0	10.5	43.0			
	3750	TYKW	45	C	0447.0	0454.7	14.0	52.0	10.0		
	2840	PEKG	41	F	0447.0	0450.0	25.0	30.9	10.9		
	2840	PEKG			0447.0	0454.7		45.6			
	2950	GORK	3	S	0447.6	0448.3	1.0	14.2			
	9400	TYKW	45	C	0448.0	0450.3	25.0	60.0	9.0		RAIN
	6100	KISV			0448.0	0450.2		18.0			
	6100	KISV	42	SER	0448.0	0454.8	25.0	36.0			
	6100	KISV			0448.0	0505.3		11.0			
	8800	LEAR	4	S/F	0448.1	0450.1	10.2	30.0			QL=6 ST=2 TYP=3
	4995	LEAR	47	GB	0448.1	0450.1	9.7	28.0			QL=6 ST=2 TYP=5
	2000	TYKW	45	C	0448.5	0454.8	9.0	14.0	4.0		
	8800	ATHN	4	S/F	0448.5	0455.3	19.1	49.0			QL=6 ST=2 TYP=3
	2695	ATHN	4	S/F	0448.5	0455.3	19.1	37.0			QL=6 ST=2 TYP=3
	4995	ATHN	47	GB	0448.5	0455.3	19.1	51.0			QL=6 ST=2 TYP=5
	2695	LEAR	4	S/F	0448.8	0450.1	8.2	10.0			QL=6 ST=2 TYP=3
	15400	LEAR	4	S/F	0449.0	0450.1	8.8	13.0			QL=6 ST=2 TYP=3
	9100	GORK	1	S	0449.0	0450.3	2.3	14.0			
	4995	MANI	4	S/F	0450.0	0456.4	8.3	70.6	23.5		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
21	2695	MANI	4	S/F	0450.5	0456.4	7.3	30.0	10.0		
	8800	MANI	4	S/F	0450.5	0456.4	7.3	62.9	21.0		
	11800	BERN	21	GRF	0452.0	0454.6	10.0D	65.0			
	8400	BERN	21	GRF	0452.0	0454.7	10.0D	80.0			
	2950	GORK			0452.7	0454.8		51.0			
	2950	GORK	45	C	0452.9	0453.7	3.4	23.0			
	9100	GORK	1	S	0453.2	0454.8	2.7	27.0			
	1000	TYKW	5	S	0454.0	0454.9	2.0	3.0	.7		
	1415	ATHN	4	S/F	0454.5	0455.3	2.1	11.0			QL=6 ST=2 TYP=3
	1415	MANI	1	S	0455.0	0456.3	2.0	4.3	1.4		
	15000	KISV	29	PBI	0457.3	0502.8	12.0	18.0			
	2000	TYKW	5	S	0500.0	0505.3	15.0	4.0	1.5		
	3750	TYKW	45	C	0501.0	0505.3	11.0	19.0	7.0		
	8800	LEAR	4	S/F	0501.1	0502.3	6.2	7.0			QL=6 ST=2 TYP=3
	2695	LEAR	4	S/F	0501.1	0505.3	5.9	11.0			QL=6 ST=2 TYP=3
	4995	LEAR	4	S/F	0501.1	0505.3	6.2	16.0			QL=6 ST=2 TYP=3
	650	GORK	23	GRF	0530.9	0818.0	328.0D	21.0			
	610	LEAR	8	S	0533.6	0533.6	1.2	10.0			QL=6 ST=2 TYP=3
	8800	ATHN	8	S	0551.6	0551.8	.5	24.0			QL=6 ST=2 TYP=3
	2695	LEAR	20	GRF	0557.3	0643.0	79.8	86.0			QL=6 ST=2 TYP=2
	9395	PEKG	20	GRF	0558.0	0641.0	51.0	21.6	10.1		
	1415	LEAR	20	GRF	0558.5	0643.0	78.3	84.0			QL=6 ST=2 TYP=2
	3100	CRIM	22	GRF	0559.5	0643.0	120.0	62.0	21.0		
	4995	LEAR	20	GRF	0559.6	0643.0	80.0	61.0			QL=6 ST=2 TYP=2
	950	GORK	21	GRF	0559.8	0707.0	360.0D	14.0			
	2840	PEKG	21	GRF	0600.0	0709.0	97.0	14.4	10.7		
	6100	KISV	2	S/F	0607.0	0611.6	7.0	17.0			
	8800	LEAR	20	GRF	0609.0	0642.8	48.1	24.0			QL=6 ST=2 TYP=2
	2000	TYKW	45	C	0625.0	0643.0	45.0	73.0	23.0		
	3750	TYKW	45	C	0625.0	0643.2	70.0	56.0	14.0		
	1415	ATHN	47	GB	0625.0	0643.5	34.0	89.0			QL=6 ST=2 TYP=5
	1000	TYKW	45	C	0625.5	0645.6	44.5	69.0	26.0		
	2695	ATHN	47	GB	0625.6	0643.5	33.4	68.0			QL=6 ST=2 TYP=5
	2840	PEKG	45	C	0626.0	0641.0	42.0	71.7	14.0		
	2840	PEKG			0626.0	0642.0		72.0			
	536	ONDR	48	C	0626.7	0644.8	62.3	75.0	43.0		
	2695	MANI	22	GRF	0627.0	0643.2	29.5	74.9	25.0		
	4995	MANI	22	GRF	0627.0	0644.0	22.5	60.0	20.0		
	500	HIRA	45	C	0631.0	0644.4	45.0	125.0	50.0		MR
	245	LEAR	20	GRF	0632.0	0642.0	17.0	150.0			QL=5 ST=2 TYP=2
	410	LEAR	20	GRF	0632.0	0645.0	25.0	130.0			QL=5 ST=2 TYP=2
	4995	ATHN	4	S/F	0632.3	0643.5	26.7	42.0			QL=6 ST=2 TYP=3
	650	GORK	46	C	0632.5	0643.8	36.5	60.0			
	650	GORK			0632.5	0655.0		40.0			
	650	GORK			0632.5	0703.3		30.0			
	1415	MANI	22	GRF	0633.0	0639.5	24.5	95.7	31.9		
	950	GORK	45	C	0633.0	0642.3	33.0	52.0			
	8800	MANI	22	GRF	0633.0	0642.5	16.5	68.5	22.8		
	950	GORK			0633.0	0655.7		27.0			
	6100	KISV	23	GRF	0633.8	0642.1	15.0	28.0			
	9400	TYKW	45	C	0634.0	0639.6	15.0	15.0	5.0		
	808	ONDR	48	C	0634.0	0645.8	51.0	56.0	37.0		
	8800	ATHN	4	S/F	0635.0	0639.6	4.8	9.0			QL=6 ST=2 TYP=3
	2650	DWIN	4	S/F	0635.0	0643.0	15.0	50.0	30.0		
	2950	GORK	45	C	0635.2	0639.7	14.1	34.0			
	2950	GORK			0635.2	0642.0		47.0			
	2950	GORK			0635.2	0643.2		48.0			
	2950	GORK			0635.2	0644.5		44.0			
	100	GORK	41	F	0637.1	0638.9	5.6	100.0D			
	100	GORK			0637.1	0641.4		240.0			
	6100	KISV	40	F	0654.0	0654.7	45.0	9.0			
	2950	GORK	1	S	0654.2	0655.0	1.7	7.8			
	1000	TYKW	30	PBI	0710.0		110.0D	8.0	6.0D		
	2000	TYKW	30	PBI	0710.0		60.0	10.0	5.0		
	100	GORK	46	C	0714.7	0715.4	2.1	1560.0			
	100	GORK			0714.7	0716.3		105.0			
	2000	TYKW	5	S	0725.0	0726.0	6.0	3.0	1.0		
	1000	TYKW	45	C	0750.0	0819.8	50.0	17.0	2.0		
	930	BORD	41	F	0819.5	0820.9	1.5	16.0	2.0		
	500	HIRA	45	C	0844.0	0844.2	2.5	35.0	20.0		MR

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
21	127	TORN	8	S	0845.1	0845.7	1.2	770.0	380.0		
	6100	KISV	2	S/F	0850.2	0851.8	5.0	10.0			
	6100	KISV	2	S/F	0906.4	0911.8	9.0	11.0			
	1000	TYKW	45	C	0909.5	0911.3	3.5U	40.0	5.0U		
	930	BORD	46	C	0910.4	0911.7	3.7	47.0	4.0		
	3100	CRIM	1	S	0911.0	0913.0	4.0	9.0	3.0		
	3100	CRIM	26	FAL	0915.0	1048.0		7.0			
	950	GORK	2	S/F	0958.9	0959.1	.4	39.0			
	2800	OTTA	21	GRF	1050.0	1125.0	300.0D	21.6			
	2950	GORK	1	S	1055.9	1059.0	5.3	5.3			
	9100	GORK	21	GRF	1057.0	1126.7	63.0D	29.0			
	3100	CRIM	1	S	1112.0	1113.5	5.0	11.0	4.0		
	2800	OTTA	2	S/F	1113.0	1114.0	3.0	9.2	4.6		
	4995	SGMR	4	S/F	1113.1	1114.1	3.9	26.0			QL=6 ST=2 TYP=3
	8800	SGMR	4	S/F	1113.1	1114.1	5.2	16.0			QL=6 ST=2 TYP=3
	9100	GORK	2	S/F	1113.2	1114.1	4.1	17.0			
	2695	SGMR	4	S/F	1113.3	1114.8	3.3	21.0			QL=6 ST=2 TYP=3
	2950	GORK	1	S	1113.5	1114.9	2.3	7.9			
	2800	OTTA	40	F	1221.0	1223.0	25.0	10.4			
	2650	DWIN	2	S/F	1223.0	1223.0	1.0	30.0	15.0		
	6100	KISV	2	S/F	1230.7	1231.8	3.0	8.0			
	4995	SGMR	8	S	1231.5	1231.6	1.3	11.0			QL=6 ST=2 TYP=3
	15400	SGMR	4	S/F	1322.3	1323.8	2.5	28.0			QL=3 ST=2 TYP=3
	2800	OTTA	1	S	1323.0	1324.0	4.0	4.0	2.0		
	1415	SGMR	8	S	1323.3	1323.8	1.5	18.0			QL=6 ST=2 TYP=3
	9400	HUAN	2	S/F	1323.5	1324.5	2.2	17.8	8.0		0
	8800	SGMR	8	S	1323.6	1324.0	1.0	23.0			QL=6 ST=2 TYP=3
	1415	ATHN	4	S/F	1323.6	1324.6	4.0	9.0			QL=6 ST=2 TYP=3
	4995	ATHN	4	S/F	1323.6	1324.6	3.0	11.0			QL=6 ST=2 TYP=3
	8800	ATHN	4	S/F	1323.6	1324.8	3.5	13.0			QL=6 ST=2 TYP=3
	6100	KISV	2	S/F	1323.8	1324.7	2.0	8.0			
	2695	ATHN	4	S/F	1324.0	1324.8	2.8	6.0			QL=6 ST=2 TYP=3
	9400	HUAN	29	PBI	1325.7	1325.7	38.9	7.1	3.4		0
	930	BORD	41	F	1337.4	1337.5	.2	29.0	2.0		
	2800	OTTA	1	S	1425.0	1426.0	6.0	4.0	2.0		
	930	BORD	41	F	1439.6	1439.8	.4	21.0	3.0		
	2800	OTTA	21	GRF	1605.0	1615.0	40.0	16.0			
	4995	SGMR	47	GB	1608.3	1614.5	11.2	50.0			QL=6 ST=2 TYP=5
	8800	ATHN	47	GB	1608.6	1615.3	17.5	100.0			QL=6 ST=2 TYP=5
	4995	ATHN	47	GB	1608.6	1616.1	16.5	110.0			QL=6 ST=2 TYP=5
	2695	ATHN	4	S/F	1609.1	1616.3	14.7	38.0			QL=6 ST=2 TYP=3
	1415	ATHN	47	GB	1609.5	1616.1	15.8	100.0			QL=6 ST=2 TYP=5
	8800	SGMR	47	GB	1610.6	1612.8	8.9	37.0			QL=6 ST=2 TYP=5
	2695	SGMR	47	GB	1610.8	1614.5	6.3	23.0			QL=6 ST=2 TYP=5
	2800	OTTA	3	S	1612.0	1612.7	1.0	10.0	5.0		
	8400	BERN	21	GRF	1612.0	1614.8	40.0	132.0			
	11800	BERN	21	GRF	1612.0	1614.8	10.0U	51.0			
	930	BORD	46	C	1612.0	1615.8	6.0	117.0	8.0		
	410	SGMR	47	GB	1612.3	1612.5	.3	200.0			QL=6 ST=2 TYP=5
	610	SGMR	47	GB	1612.3	1614.0	4.5	169.0			QL=6 ST=2 TYP=5
	1415	SGMR	47	GB	1612.3	1614.5	4.8	36.0			QL=6 ST=2 TYP=5
	2650	DWIN	2	S/F	1613.0	1616.0	8.0	48.0	20.0		
	245	SGMR	47	GB	1613.8	1614.3	.5D	230.0			QL=6 ST=2 TYP=5
	2800	OTTA	4	S/F	1614.0	1615.8	4.0	37.4	21.0		
	11800	BERN	41	F	1652.0	1653.1	2.0	41.0			
	8400	BERN	3	S	1652.5	1653.1	1.0	40.0			
	8800	SGMR	8	S	1652.6	1653.0	.5	36.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	1723.5	1723.6	.3	41.0			QL=6 ST=2 TYP=3
	2800	OTTA	40	F	1744.0	1745.2	12.0	5.2			
	930	BORD	8	S	1744.4	1744.4	.1	38.0	1.0		
	930	BORD	41	F	1754.4	1754.7	1.0	180.0	3.0		
	8800	SGMR	8	S	1808.1	1808.3	.7	36.0			QL=6 ST=2 TYP=3
	8800	PALE	8	S	1808.3	1808.6	.5	30.0			QL=6 ST=2 TYP=3
	15400	SGMR	4	S/F	1826.0	1827.6	2.1	30.0			QL=6 ST=2 TYP=3
	9400	HUAN	20	GRF	1854.4	1914.2	37.1	3.2	2.0		0
	2800	OTTA	26A	FAL	1920.0	1945.0	25.0	-4.4	-2.2		
	2800	OTTA	1	S	1932.0	1932.2	1.0	2.8	1.4		
	245	PALE	49	GB	2006.6	2006.8	5.5	520.0			QL=6 ST=2 TYP=6
	3750	TYKW	21	GRF	2145.0	2252.0	290.0	14.0	7.0		
	2800	OTTA	23	GRF	2200.0	2227.0	230.0D	25.4			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
21	2000	TYKW	21	GRF	2215.0	0020.0	255.0	9.0	5.0		
	1000	TYKW	21	GRF	2215.0	2330.0	255.0	3.0	1.5		
	2000	TYKW	45	C	2225.0	2226.1	5.0	11.0	1.5		
	3750	TYKW	45	C	2225.0	2226.6	8.0	7.0	2.0		
	9400	TYKW	45	C	2225.0	2227.0	20.0	17.0	5.0		
	1000	TYKW	45	C	2225.4	2226.1	1.5	9.0	1.0		
	2800	OTTA	8	S	2226.7	2226.9	.3	18.0			
	9400	TYKW	21	GRF	2249.0	2254.5	205.0	11.0	6.0		
	3750	TYKW	28	PRE	2255.0	2300.0	5.5	9.0	4.0		
	9400	TYKW	45	C	2256.0	2301.9	34.0	270.0	34.0		
	17000	NOBE	7	C	2256.6	2301.8	12.5	230.0			R
	8800	PALE	47	GB	2259.8	2302.1	12.0	320.0			QL=6 ST=2 TYP=5
	35000	NAGO	20	GRF	2300.0	2302.0	40.0	76.0			
	3750	TYKW	45	C	2300.5	2302.2	8.5	212.0	48.0		
	2000	TYKW	45	C	2300.5	2302.3	8.5	86.0	20.0		
	15400	PALE	47	GB	2300.6	2301.6	7.5	230.0			QL=6 ST=2 TYP=5
	4995	PALE	47	GB	2300.6	2302.1	9.0	239.0			QL=6 ST=2 TYP=5
	2695	PENT	4	S/F	2300.8	2302.0	9.0	162.0	31.0		
	2695	PALE	47	GB	2301.5	2302.1	3.8	180.0			QL=6 ST=2 TYP=5
	1000	TYKW	45	C	2301.5	2305.8	11.0	11.0	2.0		
	1415	PALE	4	S/F	2301.6	2302.5	2.2	30.0			QL=6 ST=2 TYP=3
	2695	MANI	3	S	2301.8	2302.5	2.8	167.4	55.8		
	2000	TYKW	30	PBI	2309.0		45.0	6.0	3.0		
	3750	TYKW	30	PBI	2309.0		190.0	20.0	10.0		
	17000	NOBE	29	PBI	2309.1	2309.1	35.0	47.0			0
	2000	TYKW	20		2315.0	2318.0	30.0	1.5	.7		
	3750	TYKW	20	GRF	2315.0	2320.0	30.0	4.0	2.0		
	9400	TYKW	30	PBI	2330.0		90.0	13.0	6.0		
	9400	TYKW	20	GRF	2350.0	0010.0	50.0	14.0	7.0		
	3750	TYKW	5	S	2355.5	2356.1	1.5	6.0	1.5		
	3750	TYKW	20	GRF	2357.0	0010.0	60.0	12.0	4.0		
22	200	GORK	44	NS	0309.0E		531.0D		130.0		
	100	GORK	44	NS	0309.0E		530.0D		10.0		
	29	UPIC	44	NS	0330.0E	1019.2	698.8D				
	260	ONDR	44	NS	0542.0E	0715.0U	470.0D	202.0U			
	127	TORN	44	NS	0600.0E		530.0D		17.0		V1
	204	IZMI	43	NS	0600.0		360.0D	80.0			
	204	IZMI	44	NS	0600.0E		360.0D	190.0			
	200	HIRA	44	NS	1918.0E	0257.0	875.0D	38.0	20.0		MR
	100	HIRA	44	NS	1918.0E	2154.0	875.0D	700.0	135.0		SR
	208	VORO	44	NS	2100.0E		360.0D		10.0		
	245	LEAR	43	NS	2321.0	0702.1	609.0D	490.0			QL=6 ST=2 TYP=1
	2695	PENT	1	S	0005.0	0005.6	1.0	4.2	3.2		
	1000	TYKW	5	S	0009.6	0009.7	.5	35.0	6.0		
	15400	LEAR	8	S	0012.1	0013.6	1.5	20.0			QL=6 ST=3 TYP=3
	8800	LEAR	8	S	0012.3	0013.1	1.5	13.0			QL=6 ST=3 TYP=3
	15400	PALE	4	S/F	0012.6	0014.1	5.2	31.0			QL=6 ST=2 TYP=3
	410	LEAR	4	S/F	0023.0	0024.3	2.5	13.0			QL=6 ST=2 TYP=3
	245	LEAR	47	GB	0023.0	0025.1	2.8	89.0			QL=6 ST=3 TYP=5
	2695	PENT	3	S	0048.5	0049.0	2.0	20.8	7.0		
	3750	TYKW	20	GRF	0124.0	0129.0	35.0	3.0	1.5		
	100	HIRA	46	C	0146.4	0147.0	3.0	4600.0	800.0		WL
	245	LEAR	49	GB	0154.1	0156.3	21.5	610.0			QL=6 ST=3 TYP=6
	410	LEAR	4	S/F	0156.0	0156.1	12.8	26.0			QL=6 ST=2 TYP=3
	245	PALE	49	GB	0202.1	0202.6	14.4	830.0			QL=6 ST=2 TYP=6
	3750	TYKW	5	S	0204.0	0206.5	6.0	3.0	1.0		
	2000	TYKW	45	C	0204.5	0205.6	4.0	6.0	2.0		
	1000	TYKW	45	C	0204.5	0206.7	8.0	65.0	8.0		
	606	MANI	4	S/F	0205.0	0205.8	2.8	64.7	21.6		
	1415	MANI	4	S/F	0205.0	0206.3	2.5	45.8	15.3		
	500	HIRA	45	C	0205.0	0206.5	2.0	45.0	20.0		MR
	610	LEAR	47	GB	0205.3	0205.5	2.3	110.0			QL=6 ST=3 TYP=5
	610	PALE	47	GB	0205.3	0205.5	1.5	100.0			QL=6 ST=2 TYP=5
	1415	LEAR	8	S	0205.5	0206.3	1.6	20.0			QL=6 ST=3 TYP=3
	410	PALE	47	GB	0205.6	0206.8	1.4	96.0			QL=6 ST=2 TYP=5
	410	LEAR	8	S	0206.3	0206.5	1.3	26.0			QL=6 ST=2 TYP=3
	1415	PALE	8	S	0206.6	0206.8	.2	22.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	0222.0	0223.4	8.0	3.0	1.0		
	3750	TYKW	20	GRF	0242.0	0251.0	85.0	5.0	3.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
22	2000	TYKW	20	GRF	0243.0	0300.0	80.0	3.0	1.5		
	1000	TYKW	5	S	0247.7	0248.1	.7	6.0	1.5		
	2000	TYKW	20	GRF	0416.0	0424.0	35.0	3.0	1.0		
	3750	TYKW	5	S	0422.0	0425.0	25.0	2.0	1.0		
	9400	TYKW	20	GRF	0423.0	0432.0	30.0	3.0	1.0		
	3750	TYKW	28	PRE	0505.0	0506.5	24.0	6.0	3.0		
	2000	TYKW	21	GRF	0505.0	0554.0	205.0	10.0	5.0		
	9400	TYKW	21	GRF	0510.0	0640.0	180.0	24.0	12.0		
	8800	ATHN	47	GB	0520.1	0534.3	39.9	82.0			QL=6 ST=2 TYP=5
	9400	TYKW	45	C	0527.0	0533.9	9.0	61.0	22.0		
	2950	GORK	20	GRF	0527.0	0532.7	195.0	18.6			
	9100	GORK	4	S/F	0527.0	0533.9	6.9U	50.0			
	9100	GORK	21	GRF	0527.0	0551.5	132.0	24.0			
	8400	BERN	22	GRF	0528.0	0533.9	50.0U	91.0			
	11800	BERN	22	GRF	0528.0	0533.9	50.0U	139.0			
	9395	PEKG	45	C	0528.0	0533.9	13.0	57.8	15.8		
	8800	LEAR	47	GB	0528.6	0533.8	12.2	82.0			QL=6 ST=2 TYP=5
	4995	LEAR	4	S/F	0528.8	0532.1	12.0	44.0			QL=6 ST=2 TYP=3
	4995	ATHN	4	S/F	0528.8	0534.3	31.2	40.0			QL=6 ST=2 TYP=3
	3750	TYKW	45	C	0529.0	0532.0	11.0	37.0	18.0		
	2840	PEKG	45	C	0529.0	0532.0	11.0	18.6	5.2		
	1000	TYKW	21	GRF	0530.0	0605.0	110.0	2.0	1.0		
	3100	CRIM	1	S	0530.0	0532.0	5.0	22.0	7.0		
	2695	LEAR	4	S/F	0530.3	0532.1	10.5	20.0			QL=6 ST=2 TYP=3
	15400	LEAR	4	S/F	0530.3	0533.8	10.5	39.0			QL=6 ST=2 TYP=3
	2000	TYKW	5	S	0531.0	0532.2	3.0	5.0	3.0		
	15000	KISV	42	SER	0531.2E	0533.9	20.0U	65.0D			
	2695	ATHN	4	S/F	0531.6	0534.0	12.0	8.0			QL=6 ST=2 TYP=3
	6100	KISV	4	S/F	0532.5E	0534.1	4.0D	30.0D			
	245	LEAR	47	GB	0533.3	0533.6	.7	139.0			QL=6 ST=2 TYP=5
	410	LEAR	8	S	0533.6	0533.6	.4	32.0			QL=6 ST=2 TYP=3
	2000	TYKW	29	PBI	0534.0		15.0	3.0	1.5		
	1000	TYKW	8	S	0534.8	0534.9	.2	15.0	4.0		
	3100	CRIM	29	PBI	0535.0	0535.0	30.0	8.0	3.0		
	9400	TYKW	29	PBI	0536.0		40.0	18.0	9.0		
	6100	KISV	29	PBI	0536.5	0551.0E	35.0U	11.0			
	3750	TYKW	30	PBI	0540.0		150.0	16.0	8.0		
	3750	TYKW	5	S	0544.0	0550.0	25.0	4.0	1.5		
	950	GORK	21	GRF	0549.5	0756.0	295.5	15.0			
	15000	KISV	29	PBI	0551.2E	0555.0U	40.0U	62.0			
	245	LEAR	47	GB	0554.3	0554.8	1.0	100.0			QL=6 ST=2 TYP=5
	610	LEAR	8	S	0554.8	0554.8	.2	13.0			QL=6 ST=2 TYP=3
	3750	TYKW	21	GRF	0615.0	0632.0	80.0	6.0	3.0		
	200	HIRA	8	S	0642.4	0642.5	.4	8200.0			0
	245	LEAR	49	GB	0642.6	0642.6	.5	3600.0			QL=6 ST=2 TYP=6
	410	LEAR	47	GB	0642.6	0642.8	.4	119.0			QL=6 ST=2 TYP=5
	3750	TYKW	5	S	0644.0	0644.2	1.0	6.0	1.5		
	430	KRAK	42	SER	0700.0	0718.7	270.0	75.0			
	430	KRAK			0700.0	1041.8		160.0			
	245	LEAR	49	GB	0712.8	0713.1	.8	4600.0			QL=6 ST=2 TYP=6
	410	LEAR	47	GB	0712.8	0713.1	.5	100.0			QL=6 ST=2 TYP=5
	1000	TYKW	5	S	0713.0	0713.2	1.0	2.5	1.0		
	200	HIRA	8	S	0713.0	0713.1	.5	4300.0			WR
	204	IZMI	45	C	0713.0	0713.2	1.0	2450.0	1500.0		
	2000	TYKW	45	C	0750.0	0756.0	20.0	5.0	1.5		
	3750	TYKW	5	S	0751.0	0755.0	15.0	3.0	1.0		
	930	BORD	8	S	1004.3	1004.3	.1	19.0	1.0		
	100	GORK	41	F	1015.0	1016.3U	3.8	130.0D			
	100	GORK			1015.0	1018.7		1580.0D			
	3100	CRIM	20	GRF	1015.5	1018.5	13.0	15.0	5.0		
	6100	KISV	21	GRF	1015.8	1018.9	9.0	14.0			
	536	ONDR	40	F	1016.0	1018.8	55.4	18.0			
	29	UPIC	46	C	1016.2	1019.2	18.3				
	650	GORK	4	S/F	1016.4	1018.3	7.4	50.0			
	808	ONDR	40	F	1017.0	1018.4	9.0	25.0			
	930	BORD	46	C	1017.0	1018.5	8.0	38.0	5.0		
	950	GORK	4	S/F	1017.1	1018.6	6.7	27.0			
	2950	GORK	20	GRF	1017.1	1018.7	13.4	11.0	5.0		
	9100	GORK	20	GRF	1017.3	1018.9	101.0	15.0			
	810	KRAK	8	S	1017.6	1017.8	.6	62.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
22	2950	GORK	20	GRF	1042.0	1050.0	12.0	3.0	1.5		
	2800	OTTA	20	GRF	1105.0	1120.0	40.0	4.2	2.8		
	2950	GORK	20	GRF	1106.0	1112.0	31.0	3.0	1.5		
	2800	OTTA	4	S/F	1154.0	1154.2	1.0	10.0	5.0		
	2950	GORK	1	S	1154.1	1154.2	.6	37.0	1.8		
	2800	OTTA	21	GRF	1200.0	1300.0	110.0	6.4	4.0		
	2650	DWIN	2	S/F	1215.0	1219.0	10.0	20.0	10.0		
	2800	OTTA	1	S	1217.5	1220.5	4.5	5.6	2.8		
	6100	KISV	2	S/F	1218.0	1220.1	6.0	15.0			
	11800	BERN	20	GRF	1219.0	1220.1	30.0U	25.0			
	8400	BERN	20	GRF	1219.0	1220.3	30.0	28.0			
	9400	HUAN	29	PBI	1223.6	1223.6	12.9	4.7	2.6		0
	930	BORD	41	F	1356.0	1356.2	.4	29.0	2.0		
	9400	HUAN	1	S	1402.5	1403.4	2.5	11.3	3.5		0
	9400	HUAN	23	GRF	1421.2	1437.8	207.4	46.9	15.1		0
	2800	OTTA	23	GRF	1425.0	1457.0	270.0	24.6	13.2		
	9400	HUAN	4	S/F	1429.2	1430.9	2.8	30.0	17.9		0
	9400	HUAN	3	S	1433.0	1433.4	1.5	26.3	11.3		0
	930	BORD	41	F	1713.0	1713.4	.6	36.0	2.0		
	9400	HUAN	4	S/F	1830.2	1833.5	4.9	28.2	16.9		0
	9400	HUAN	29	PBI	1835.1	1835.1	17.4	11.3	3.8		0
	2800	OTTA	1	S	1845.0	1845.5	1.2	9.6	4.4		
	4995	PALE	8	S	1845.6	1845.6	.4	38.0			QL=6 ST=2 TYP=3
	2695	PENT	32	ABS	2240.0	2315.0	60.0	-5.6	-3.0		
	2000	TYKW	32	ABS	2243.0	2310.0	55.0	-3.5	-2.0		
	3750	TYKW	32	ABS	2244.0	2310.0	55.0	-7.0	-4.0		
	9400	TYKW	32	ABS	2246.0	2315.0	51.0	-10.0	-6.0		
	2930	VORO	3	S	2300.0	2303.0	10.0	187.0			
	2695	PENT	21	GRF	2341.0	0015.0	90.0	8.4	4.2		
	2000	TYKW	21	GRF	2350.0	0012.0	70.0	3.0	1.5		
	9400	TYKW	28	PRE	2352.0	0004.0U	12.0D	4.0D	2.0D		
	3750	TYKW	28	PRE	2355.0	0005.0	10.0	3.5	2.0		
23	410	LEAR	43	NS	0301.8	0315.5	388.2D	69.0			QL=6 ST=2 TYP=1
	100	GORK	44	NS	0312.0E		468.0D		15.0		
	200	GORK	44	NS	0320.0E		410.0D		20.0		
	260	ONDR	44	NS	0544.0E	0703.0U	424.0D	162.0U			
	204	IZMI	43	NS	0600.0		360.0D	80.0			
	29	UPIC	43	NS	0703.3		686.7D				
	127	TORN	44	NS	0710.0E	0838.9	510.0D	570.0	59.0		V1
	245	SGMR	43	NS	0930.0	1302.3		100.0			QL=6 ST=2 TYP=1
	245	PALE	43	NS	1845.6	0103.0	569.4D	92.0			QL=6 ST=2 TYP=1
	100	HIRA	44	NS	1920.0E	2010.0	875.0D	560.0	150.0		SR
	200	HIRA	44	NS	1920.0E	2028.0	875.0D	27.0	13.0		MR
	208	VORO	44	NS	2100.0E		360.0D		9.0		
	245	LEAR	43	NS	2321.0	0103.0	610.0D	58.0			QL=6 ST=2 TYP=1
	3750	TYKW	45	C	0005.0	0005.9	3.0	27.0	12.0		
	8800	LEAR	47	GB	0005.0	0005.5	10.1	71.0			QL=6 ST=2 TYP=5
	8800	MANI	3	S	0005.0	0006.0	2.9	82.8	27.6		
	8800	PALE	47	GB	0005.1	0005.5	8.7	81.0			QL=6 ST=2 TYP=5
	15400	LEAR	47	GB	0005.1	0005.8	10.0	64.0			QL=6 ST=2 TYP=5
	4995	LEAR	4	S/F	0005.1	0005.8	9.2	49.0			QL=6 ST=2 TYP=3
	2695	MANI	3	S	0005.1	0005.9	2.7	20.8	6.9		
	4995	MANI	3	S	0005.1	0006.0	2.0	91.2	30.4		
	17000	NOBE	1	S	0005.2	0005.5	1.4	55.0			R
	15400	PALE	47	GB	0005.3	0005.5	8.5	76.0			QL=6 ST=2 TYP=5
	4995	PALE	47	GB	0005.3	0005.6	6.8	54.0			QL=6 ST=2 TYP=5
	2695	PALE	8	S	0005.3	0005.6	1.7	18.0			QL=6 ST=2 TYP=3
	2695	LEAR	8	S	0005.3	0005.8	2.0	11.0			QL=6 ST=2 TYP=3
	17000	NOBE	29	PBI	0006.6	0006.6	33.0	18.0			0
	9400	TYKW	5	S	0007.0E	0007.0U	12.0D	24.0D	12.0D		
	3750	TYKW	30	PBI	0008.0		52.0	10.0	5.0		
	9400	TYKW	30	PBI	0019.0		34.0U	9.0	4.0		INTERFERENCE
	500	HIRA	8	S	0032.4	0032.6	.2	160.0			WR
	245	LEAR	8	S	0034.0	0034.3	.5	13.0			QL=6 ST=2 TYP=3
	500	HIRA	8	S	0034.1	0034.2	.1	150.0			WR
	610	LEAR	8	S	0034.3	0034.3	.2	6.0			QL=6 ST=2 TYP=3
	410	LEAR	49	GB	0034.3	0034.3	.3	790.0			QL=6 ST=2 TYP=6
	2000	TYKW	45	C	0048.0	0048.9	3.0	18.0	4.0		
	3750	TYKW	5	S	0048.0	0049.0	3.5	15.0	3.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
23	245	LEAR	8	S	0048.0	0048.3	1.3	13.0			QL=6 ST=2 TYP=3
	2840	PEKG	3	S	0048.0	0049.1	3.0	27.6	6.2		
	500	HIRA	45	C	0048.4	0048.6	1.4	140.0	45.0		ML
	1415	MANI	3	S	0048.5	0048.7	2.7	80.8	26.9		
	2695	MANI	3	S	0048.5	0048.7	1.3	36.0	8.7		
	606	MANI	4	S/F	0048.5	0048.7	1.0	132.2	44.1		
	1000	TYKW	45	C	0048.5	0048.9	2.0	24.0	5.0		
	9395	PEKG	1	S	0048.5	0049.0	1.5	7.5	2.4		
	4995	MANI	3	S	0048.5	0049.0	.5	30.4	10.1		
	1415	LEAR	8	S	0048.6	0048.8	1.2	32.0			QL=6 ST=2 TYP=3
	610	PALE	49	GB	0048.6	0048.8	1.4	570.0			QL=6 ST=2 TYP=6
	1415	PALE	8	S	0048.6	0048.8	.5	40.0			QL=6 ST=2 TYP=3
	4995	LEAR	4	S/F	0048.6	0048.8	2.2	15.0			QL=6 ST=2 TYP=3
	610	LEAR	47	GB	0048.6	0049.0	1.5	450.0			QL=6 ST=2 TYP=5
	8800	LEAR	8	S	0048.6	0049.0	1.2	10.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0048.6	0049.1	1.2	44.0			QL=6 ST=2 TYP=3
	2695	LEAR	8	S	0048.6	0049.1	1.2	21.0			QL=6 ST=2 TYP=3
	410	PALE	8	S	0048.8	0048.8	.3	39.0			QL=6 ST=2 TYP=3
	9400	TYKW	31	ABS	0053.0U	0115.0	105.0U	-9.0	-5.0		
	2000	TYKW	31	ABS	0100.0	0115.0	88.0	-2.0	-1.0		
	3750	TYKW	31	ABS	0100.0	0115.0	70.0	-3.0	-1.5		
	3750	TYKW	20	GRF	0132.0	0134.0	30.0	3.0	1.0		
	9400	TYKW	5	S	0158.0	0158.3	1.0	11.0	4.0		
	17000	NOBE	1	S	0220.4	0220.7	.7	19.0			0
	15400	LEAR	8	S	0220.5	0220.6	.6	11.0			QL=6 ST=2 TYP=3
	1000	TYKW	21	GRF	0225.0	0305.0	180.0	2.0	1.0		
	3750	TYKW	21	GRF	0227.0	0232.0	135.0	4.0	2.0		
	2695	LEAR	20	GRF	0227.3	0235.8	13.7	18.0			QL=6 ST=2 TYP=2
	4995	LEAR	20	GRF	0227.6	0235.3	12.7	11.0			QL=6 ST=2 TYP=2
	2000	TYKW	5	S	0228.0	0235.8	10.0	10.0	4.0		
	410	LEAR	8	S	0228.0	0228.3	.6	13.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0228.1	0228.3	.2	5.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	0233.0	0235.4	6.0	10.0	5.5		
	2840	PEKG	5	S	0234.0	0235.6	19.0	12.2	6.3		
	2000	TYKW	30	PBI	0238.0		50.0	6.0	3.0		
	3750	TYKW	30	PBI	0239.0		40.0	5.0	2.5		
	9395	PEKG	3	S	0240.0	0240.7	1.5	13.9	2.4		
	410	LEAR	47	GB	0245.6	0245.8	.5	110.0			QL=6 ST=2 TYP=5
	3750	TYKW	5	S	0310.0	0310.3	1.0	3.0	1.0		
	1000	TYKW	5	S	0310.0	0310.4	1.0	1.0	.3		
	2000	TYKW	5	S	0310.0	0310.4	2.0	1.5	.5		
	100	HIRA	46	C	0320.6	0321.8	2.4	250.0	145.0		SR
	200	HIRA	46	C	0321.0	0321.3	1.7	610.0	145.0		SR
	3750	TYKW	5	S	0327.0	0329.5	4.0	8.0	3.0		
	9400	TYKW	5	S	0328.0	0329.5	3.0	17.0	6.0		
	9100	GORK	1	S	0328.6	0329.4	1.4	18.0	9.0		
	200	HIRA	46	C	0329.0	0334.7	9.3	56.0	29.0		MR
	3750	TYKW	29	PBI	0331.0		12.0	3.0	1.5		
	9400	TYKW	30	PBI	0331.0		17.0	4.0	2.0		
	500	HIRA	42	SER	0338.0	0338.0	5.6	1000.0			WR
	245	PALE	47	GB	0338.1	0338.3	3.0	76.0			QL=6 ST=2 TYP=5
	610	PALE	47	GB	0338.1	0342.8	5.0	55.0			QL=6 ST=2 TYP=5
	410	LEAR	49	GB	0338.3	0338.3	10.8	730.0			QL=6 ST=2 TYP=6
	410	PALE	49	GB	0338.3	0338.3	2.8	820.0			QL=6 ST=2 TYP=6
	610	LEAR	8	S	0338.3	0338.3	.8	31.0			QL=6 ST=2 TYP=3
	245	LEAR	47	GB	0338.3	0338.5	.3	73.0			QL=6 ST=2 TYP=5
	1000	TYKW	45	C	0338.3	0338.8	5.5	4.0	1.0		
	2000	TYKW	45	C	0338.3	0338.9	1.0	3.0	1.0		
	410	LEAR	47	GB	0342.6	0342.8	.4	110.0			QL=6 ST=2 TYP=5
	610	LEAR	47	GB	0342.6	0342.8	.5	77.0			QL=6 ST=2 TYP=5
	3750	TYKW	45	C	0347.5	0347.7	1.5U	4.0	1.5U		
	2000	TYKW	5	S	0347.5	0348.2	1.5	2.5	1.0		
	1000	TYKW	5	S	0347.6	0348.1	1.0	1.0	.3		
	2950	GORK	1	S	0347.7	0348.0	.8	3.4			
	9400	TYKW	31	ABS	0348.0	0401.0	75.0	-6.0	-3.0		
	100	HIRA	46	C	0413.5	0415.0	3.0	2000.0	357.0		SR
	3750	TYKW	5	S	0415.0	0421.4	20.0U	2.0	.7U		
	2000	TYKW	32	ABS	0425.0	0445.0	60.0	-2.0	-1.0		
	2840	PEKG	28	PRE	0449.0		125.0	25.7	16.8		
	9395	PEKG	20	GRF	0449.0	0505.0	31.0	5.0	4.6		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
23	3750	TYKW	21	GRF	0450.0	0524.0	75.0U	6.0	3.5U		
	2000	TYKW	42	SER	0505.5	0506.6	8.0	14.0	1.0		
	2000	TYKW	32	ABS	0545.0	0625.0	60.0	-3.0	-1.5		
	3750	TYKW	31	ABS	0605.0	0620.0	25.0U	-4.0	-2.0U		
	1000	TYKW	32	ABS	0610.0	0625.0	50.0	-2.0	-1.0		
	9400	TYKW	32	ABS	0616.0	0619.0	20.0	-8.0	-4.0		
	950	GORK	21	GRF	0625.1	1039.0	414.0D	20.0			
	6100	KISV	28	PRE	0627.4	0642.4	22.5	18.0			
	9100	GORK	21	GRF	0628.3	0701.6	277.0	53.0			
	2000	TYKW	5	S	0630.0	0630.7	4.0	4.0	1.5		
	3750	TYKW	28	PRE	0630.0	0648.7	20.0U	8.0	3.5U		
	9400	TYKW	28	PRE	0638.0	0642.2	12.0	16.0	7.0		
	9395	PEKG	28	PRE	0639.0	0642.3	11.0	15.0	4.3		
	2950	GORK	21	GRF	0639.8	0730.0	237.0	20.0			
	4995	ATHN	4	S/F	0640.1	0642.6	7.9	11.0			QL=6 ST=2 TYP=3
	8800	ATHN	4	S/F	0640.1	0642.6	7.9	25.0			QL=6 ST=2 TYP=3
	2950	GORK			0645.7	0656.2		12.0			
	2000	TYKW	21	GRF	0648.0	0730.0	135.0	8.0	4.0		
	1415	ATHN	4	S/F	0649.6	0653.6	10.5	8.0			QL=6 ST=2 TYP=3
	4995	ATHN	47	GB	0649.6	0655.5	57.7	59.0			QL=6 ST=2 TYP=5
	8800	ATHN	47	GB	0649.6	0655.5	57.7	50.0			QL=6 ST=2 TYP=5
	2695	LEAR	4	S/F	0649.8	0652.6	55.2	13.0			QL=6 ST=2 TYP=3
	3750	TYKW	45	C	0650.0	0655.2	13.0U	52.0	25.0U		
	9400	TYKW	45	C	0650.0	0655.2	40.0	47.0	36.0		
	9400	TYKW			0650.0	0704.0		43.0			
	6100	KISV			0650.0	0652.5		41.0			
	3100	CRIM	3	S	0650.0	0655.2	8.0	39.0	13.0		
	9395	PEKG	45	C	0650.0	0655.2	23.0	21.5	18.6		
	2840	PEKG	45	C	0650.0	0655.2	9.0	62.1	38.3		
	6100	KISV	45	C	0650.0	0655.2	6.0	46.0			
	15000	KISV	21	GRF	0650.1	0652.7	11.5	32.0			
	4995	LEAR	47	GB	0650.1	0652.8	54.9	40.0			QL=6 ST=2 TYP=5
	15000	KISV			0650.1	0655.0		28.0			
	9100	GORK	1	S	0651.6	0652.7	1.9	16.0	3.0		
	2000	TYKW	45	C	0652.0	0655.2	6.0	7.0	2.0		
	2950	GORK	45	C	0654.7	0655.1	3.1	20.0			
	9100	GORK	1	S	0654.7	0655.7	1.7	15.0	7.0		
	2650	DWIN	2	S/F	0655.0	0655.0	5.0	30.0	15.0		
	6100	KISV	29	PBI	0656.0	0656.2	170.0U	39.0			
	2000	TYKW	29	PBI	0658.0		20.0	2.0	1.0		
	3100	CRIM	29	PBI	0658.0	0658.0	122.0	15.0	5.0		
	536	ONDR	40	F	0658.1	0702.4	5.4	10.0			
	2840	PEKG	29	PBI	0659.0		55.0D	38.6			
	3750	TYKW	30	PBI	0703.0		130.0D	22.0	12.0D		
	1000	TYKW	21	GRF	0707.0	0730.0	90.0	2.0	1.0		
	9395	PEKG	29	PBI	0713.0		73.0	39.0	19.1		
	9400	TYKW	30	PBI	0730.0		80.0	30.0	14.0		
	2000	TYKW	45	C	0806.0	0806.8	5.0	6.0	1.5		
	1000	TYKW	45	C	0806.0	0809.2	4.0	16.0	2.5		
	100	HIRA	46	C	0806.0	0806.7	4.0	4700.0	940.0		0
	1415	LEAR	8	S	0806.6	0806.8		20.0			QL=6 ST=3 TYP=3
	930	BORD	41	F	0808.8	0809.1	.5	27.0	2.0		
	1000	TYKW	30	PBI	0810.0		9.0	1.0	.5		
	1000	TYKW	5	S	0817.0	0817.6	1.5	5.0	1.5		
	3750	TYKW	5	S	0836.0	0838.0	10.0	6.0	2.0		
	9400	TYKW	5	S	0839.5	0840.0	1.5	7.0	2.5		
	127	TORN	8	S	0911.2	0911.9	1.3	1200.0	600.0		
	410	LEAR	49	GB	0912.5	0912.6	.3	760.0			QL=6 ST=2 TYP=6
	610	LEAR	47	GB	0912.6	0912.6	.2	60.0			QL=6 ST=3 TYP=5
	245	LEAR	49	GB	0912.6	0912.6	.2	3399.0			QL=6 ST=2 TYP=6
	3100	CRIM	26	FAL	0917.0	1048.0		16.0			
	536	ONDR	4	S/F	0926.4	0927.1	1.9	91.0			
	500	HIRA	45	C	0926.6	0927.0	1.0	135.0	60.0		SL
	610	LEAR	47	GB	0926.8	0926.8	.2	330.0			QL=6 ST=2 TYP=5
	8400	BERN	41	F	1003.0	1022.9	60.0U	59.0			
	11800	BERN	41	F	1003.0	1022.9	60.0U	52.0			
	9100	GORK	1	S	1003.4	1003.6	.5	15.0	7.0		
	6100	KISV	2	S/F	1003.5	1003.7	3.0	15.0			
	15000	KISV	2	S/F	1003.5	1003.7	3.0	17.0			
	930	BORD	8	S	1011.1	1011.1	.1	79.0	1.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
23	6100	KISV			1020.6	1021.5		22.0			
	6100	KISV	45	C	1020.6	1023.0	4.5	28.0			
	9100	GORK	46	C	1020.8	1021.2	3.2	38.0			
	9100	GORK			1020.8	1022.9		40.0			
	15000	KISV			1020.9	1021.5		35.0			
	15000	KISV			1020.9	1023.0		39.0			
	15000	KISV	46	C	1020.9	1028.7	8.0	41.0			
	4995	ATHN	4	S/F	1021.1	1023.3	15.2	23.0			QL=6 ST=3 TYP=3
	8800	ATHN	4	S/F	1021.1	1023.3	15.2	41.0			QL=6 ST=3 TYP=3
	410	SGMR	47	GB	1022.1	1023.6	1.9	75.0			QL=6 ST=2 TYP=5
	4995	SGMR	8	S	1022.6	1022.8	.2	13.0			QL=6 ST=2 TYP=3
	15400	SGMR	8	S	1022.6	1022.8	.4	26.0			QL=6 ST=2 TYP=3
	8800	SGMR	8	S	1022.6	1022.8	.2	22.0			QL=6 ST=2 TYP=3
	930	BORD	8	S	1023.0	1023.0	.1	171.0	1.0		
	808	ONDR	8	S	1023.1	1023.1U	.2	44.0			
	6100	KISV	29	PBI	1025.0	1025.0	15.0	8.0			
	950	GORK	4	S/F	1028.3	1028.6	1.0	56.0			
	650	GORK	8	S	1028.4	1028.5	.3	38.0			
	930	BORD	46	C	1028.4	1028.6	1.0	162.0	4.0		
	2950	GORK	1	S	1028.5	1028.6	.5	15.9			
	3100	CRIM	1	S	1028.5	1028.6	1.0	14.0	4.0		
	808	ONDR	8	S	1028.6	1028.6	.2	88.0			
	15000	KISV	29	PBI	1028.9	1029.0	10.0	22.0			
	650	GORK	4	S/F	1035.8	1035.9	.4	18.0	9.0		
	2800	OTTA	21	GRF	1135.0	1235.0	280.0	13.4	6.7		
	6100	KISV	21	GRF	1142.0	1220.0	110.0	21.0			
	15000	KISV	2	S/F	1154.7	1156.0	4.0	17.0U			
	6100	KISV	2	S/F	1154.7	1156.6	3.0	16.0			
	9400	HUAN	21	GRF	1155.0	1228.5	61.7	28.7	13.2		0
	8800	ATHN	4	S/F	1155.1	1156.5	2.7	13.0			QL=6 ST=2 TYP=3
	8800	SGMR	8	S	1155.6	1155.8	.9	26.0			QL=6 ST=2 TYP=3
	4995	SGMR	8	S	1155.8	1156.3	1.2	30.0			QL=6 ST=2 TYP=3
	4995	ATHN	8	S	1156.5	1157.1	1.3	19.0			QL=6 ST=? TYP=3
	15000	KISV	21	GRF	1159.0	1206.0	45.0D	27.0U			
	2950	GORK	20	GRF	1201.0	1210.6	9.6D	3.9			
	6100	KISV	1	S	1205.1	1205.8	2.0	4.0			
	9400	HUAN	3	S	1221.5	1222.3	2.0	21.5	8.1		0
	11800	BERN	41	F	1222.0	1223.1	2.0	19.0			
	8400	BERN	41	F	1222.0	1223.3U	2.0	14.0U			
	15400	SGMR	47	GB	1222.1	1222.3	.7	59.0			QL=6 ST=2 TYP=5
	8800	SGMR	8	S	1222.1	1222.3	.4	23.0			QL=6 ST=2 TYP=3
	8800	ATHN	4	S/F	1222.5	1223.0	2.6	9.0			QL=6 ST=2 TYP=3
	536	ONDR	8	S	1256.7	1256.9	.3	20.0			
	536	ONDR	8	S	1351.8	1351.9	.2	34.0			
	9400	HUAN	1	S	1433.1	1434.1	2.4	10.8	5.7		0
	8800	ATHN	8	S	1434.3	1434.6	1.2	9.0			QL=6 ST=2 TYP=3
	2800	OTTA	1	S	1545.0	1546.2	7.0	8.6	4.0		
	930	BORD	41	F	1607.0	1607.3	.4	20.0	2.0		
	2800	OTTA	240	R	1620.0	1644.0	24.0	3.8	1.9		
	9400	HUAN	2	S/F	1620.6	1621.5	2.8	9.0	3.2		0
	9400	HUAN	3	S	1715.8	1716.5	1.7	23.3	11.0		0
	4995	ATHN	4	S/F	1715.8	1717.0	5.8	29.0			QL=6 ST=2 TYP=3
	4995	SGMR	8	S	1716.0	1716.1	.3	28.0			QL=6 ST=2 TYP=3
	8800	SGMR	8	S	1716.1	1716.1	.2	32.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	1716.8	1717.0	.3	47.0			QL=6 ST=2 TYP=3
	2695	SGMR	47	GB	1719.8	1720.1	.5	51.0			QL=6 ST=2 TYP=5
	610	SGMR	49	GB	1732.1	1733.8	1.9	500.0			QL=6 ST=2 TYP=6
	410	SGMR	8	S	1732.5	1732.8	1.3	47.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	1738.6	1738.8	.2	23.0			QL=6 ST=2 TYP=3
	1415	SGMR	4	S/F	1814.8	1821.1	8.7	33.0			QL=6 ST=2 TYP=3
	930	BORD	46	C	1815.0	1821.3	8.0	95.0	4.0		
	2800	OTTA	20	GRF	1815.0	1821.5	20.0	18.0	5.0		
	610	SGMR	49	GB	1815.1	1817.5	7.5	710.0			QL=6 ST=2 TYP=6
	610	PALE	49	GB	1815.6	1817.6	7.5	620.0			QL=6 ST=2 TYP=6
	9400	HUAN	23	GRF	1817.0	1914.0	135.0	25.1	9.3		L
	410	PALE	49	GB	1817.1	1818.8	5.7	1199.0			QL=6 ST=2 TYP=6
	2695	SGMR	4	S/F	1818.5	1820.3	4.8	41.0			QL=6 ST=2 TYP=3
	1415	PALE	4	S/F	1820.1	1821.5	2.5	23.0			QL=6 ST=2 TYP=3
	245	PALE	4	S/F	1820.3	1821.3	3.2	32.0			QL=6 ST=2 TYP=3
	4995	SGMR	8	S	1820.5	1821.1	.6D	15.0			QL=6 ST=2 TYP=3

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
23	2800	OTTA	23	GRF	1840.0	1905.0	140.0	20.4	9.6		
	9400	HUAN	4	S/F	1855.7	1857.4	2.7	28.7	14.1		0
	15400	SGMR	20	GRF	1856.6	1857.3	1.0	100.0			QL=6 ST=2 TYP=2
	8800	PALE	8	S	1856.6	1857.3	2.0	37.0			QL=6 ST=2 TYP=3
	8800	SGMR	20	GRF	1856.6	1906.0	13.4	51.0			QL=6 ST=2 TYP=2
	15400	PALE	47	GB	1856.8	1857.3	1.8	100.0			QL=6 ST=2 TYP=5
	2695	SGMR	47	GB	1856.8	1857.6	23.7	26.0			QL=6 ST=2 TYP=5
	2800	OTTA	1	S	1857.0	1857.5	1.5	6.6	3.3		
	9400	HUAN	4	S/F	1902.5	1905.5	8.0	43.0	23.7		L
	2800	OTTA	3	S	1902.5	1906.0	11.0	77.0	28.4		
	4995	SGMR	20	GRF	1903.0	1905.8	10.0	69.0			QL=6 ST=2 TYP=2
	4995	PALE	47	GB	1903.1	1906.0	9.4	69.0			QL=6 ST=2 TYP=5
	1415	SGMR	47	GB	1903.1	1907.1	7.5	57.0			QL=6 ST=2 TYP=5
	8800	PALE	47	GB	1903.3	1906.0	12.3	60.0			QL=6 ST=2 TYP=5
	245	PALE	8	S	1903.6	1904.3	1.2	31.0			QL=6 ST=2 TYP=3
	2695	PALE	47	GB	1904.0	1906.1	6.8	70.0			QL=6 ST=2 TYP=5
	1415	PALE	47	GB	1905.1	1907.3	5.5	42.0			QL=6 ST=2 TYP=5
	15400	PALE	4	S/F	1905.3	1906.1	2.5	23.0			QL=6 ST=2 TYP=3
	410	SGMR	47	GB	1905.6	1905.8	.2	100.0			QL=6 ST=2 TYP=5
	610	SGMR	20	GRF	1906.0	1906.1	.1	20.0			QL=6 ST=2 TYP=2
	3750	TYKW	21	GRF	2125.0	2151.0	55.0	3.0	1.5		
	200	HIRA	46	C	2138.0	2138.6	2.4	170.0	28.0		MR
	9400	TYKW	5	S	2151.0	2156.0	20.0	4.0	2.0		
	2000	TYKW	32	ABS	2205.0	0015.0	365.0	-8.0	-5.0		
	2800	OTTA	260	FAL	2210.0	2245.0	35.0	-6.2	-3.1		
	9400	TYKW	31	ABS	2211.0	0125.0	360.0	-15.0	-8.0		
	3750	TYKW	31	ABS	2220.0	0018.0	315.0	-10.0	-5.0		
	500	HIRA	46	C	2235.6	2235.7	2.4	700.0	300.0		SL
	9400	TYKW	45	C	2328.0	2331.6	9.0	88.0	27.0		
	3750	TYKW	45	C	2329.0	2331.5	9.0	37.0	6.0		
	2000	TYKW	45	C	2329.0	2331.6	4.0	11.0	4.0		
	3750	TYKW	21	GRF	2329.0	2342.0	45.0	6.0	3.0		
	17000	NOBE	7	C	2329.3		16.0				
	500	HIRA	42	SER	2329.3	2329.5	2.1	30.0			0
	410	SGMR	8	S	2329.3	2329.6	.3	30.0			QL=6 ST=2 TYP=3
	4995	LEAR	47	GB	2329.3	2331.5	3.0	56.0			QL=5 ST=2 TYP=5
	8800	LEAR	47	GB	2329.3	2331.6	3.0	97.0			QL=5 ST=2 TYP=5
	15400	LEAR	47	GB	2329.3	2331.6	3.0	150.0			QL=5 ST=2 TYP=5
	410	LEAR	8	S	2329.5	2329.6	.3	32.0			QL=5 ST=2 TYP=3
	2695	PENT	4	S/F	2329.5	2331.5	3.5	19.0	8.0		
	8800	MANI	4	S/F	2329.5	2332.0	3.2	134.0	44.7		
	2695	LEAR	4	S/F	2329.6	2331.6	2.7	27.0			QL=5 ST=2 TYP=3
	15400	PALE	47	GB	2330.0	2331.5	3.3	130.0			QL=6 ST=2 TYP=5
	8800	PALE	47	GB	2330.0	2331.6	6.0	89.0			QL=6 ST=2 TYP=5
	4995	MANI	4	S/F	2330.0	2332.0	3.0	56.0	18.7		
	4995	PALE	47	GB	2330.1	2331.5	2.7	51.0			QL=6 ST=2 TYP=5
	2000	TYKW	29	PBI	2333.0		30.0	2.0	1.0		
	9400	TYKW	30	PBI	2337.0		40.0	15.0	7.0		
	9400	TYKW	5	?	2354.0	2355.3	9.0	5.0	2.0		
24	200	GORK	44	NS	0300.0E		540.0D		5.0		
	100	GORK	44	NS	0300.0E		540.0D		10.0		
	260	ONDR	44	NS	0558.0E		483.0D				
	127	TORN	44	NS	0600.0E	0741.0	530.0D	180.0	4.0		V1
	204	IZMI	43	NS	0600.0		360.0D	23.0			
	200	HIRA	44	NS	1918.0E	2022.0	580.0D	10.0	5.0		WR
	410	PALE	43	NS	1940.0	2307.3	503.0D	100.0			QL=6 ST=2 TYP=1
	245	PALE	43	NS	1940.0	2338.5	503.0D	620.0			QL=6 ST=2 TYP=1
	208	VORO	44	NS	2100.0E		360.0D		3.0		
	2000	TYKW	21	GRF	0017.0	0026.0	30.0	2.0	1.0		
	3750	TYKW	5	S	0020.0	0025.0	25.0	2.0	1.0		
	500	HIRA	42	SER	0021.5	0022.0	3.2	50.0			SL
	610	LEAR	47	GB	0022.1	0022.6	2.9	290.0			QL=6 ST=2 TYP=5
	100	HIRA	46	C	0022.8	0023.0	.8	1300.0	540.0		
	2000	TYKW	45	C	0023.0	0023.4	3.0	4.0	1.0		
	1000	TYKW	45	C	0023.0	0024.4	2.5	7.0	2.0		
	3750	TYKW	20	GRF	0050.0	0105.0	35.0	2.0	1.0		
	500	HIRA	42	SER	0104.8	0106.0	13.3	95.0			SL
	610	LEAR	47	GB	0104.8	0106.1	2.2	280.0			QL=6 ST=2 TYP=5
	610	PALE	47	GB	0105.0	0106.1	2.3	390.0			QL=6 ST=2 TYP=5

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
24	1000	TYKW	45	C	0110.0	0110.2	1.0	16.0	5.0		
	610	LEAR	49	GB	0110.0	0110.6	1.0	550.0			QL=6 ST=3 TYP=6
	610	PALE	49	GB	0110.1	0110.6	1.7	630.0			QL=6 ST=2 TYP=6
	610	LEAR	47	GB	0113.3	0114.8	4.8	180.0			QL=6 ST=3 TYP=5
	1000	TYKW	45	C	0113.4	0115.4	3.2	11.0	2.0		
	9400	TYKW	21	GRF	0132.0	0147.5	50.0	7.0	3.0		
	3750	TYKW	21	GRF	0133.0	0202.0	55.0	3.0	1.5		
	2000	TYKW	21	GRF	0150.0	0205.0	40.0	1.5	.7		
	2000	TYKW	5	S	0202.4	0202.6	.6	1.5	.5		
	9395	PEKG	3	S	0206.0	0206.8	6.0	84.9	7.0		
	8800	LEAR	47	GB	0206.3	0206.8	1.3	83.0			QL=6 ST=2 TYP=5
	9400	TYKW	5	S	0206.3	0206.8	1.7	87.0	18.0		
	3750	TYKW	5	S	0206.5	0206.8	1.5	4.0	1.0		
	4995	LEAR	8	S	0206.5	0206.8	.6	15.0			QL=6 ST=2 TYP=3
	15400	LEAR	47	GB	0206.6	0206.8	.7	110.0			QL=6 ST=2 TYP=5
	8800	PALE	47	GB	0206.6	0206.8	1.4	83.0			QL=6 ST=2 TYP=5
	15400	PALE	47	GB	0206.6	0206.8	1.2	84.0			QL=6 ST=2 TYP=5
	17000	NOBE	1	S	0206.6	0206.9	.8	90.0			L
	9400	TYKW	29	PBI	0208.0		5.0	6.0	3.0		
	9395	PEKG	3	S	0232.0	0232.9	6.0	18.5	5.1		
	9400	TYKW	5	S	0232.4	0232.8	1.6	22.0	6.0		
	8800	LEAR	8	S	0232.5	0232.8	1.8	22.0			QL=6 ST=2 TYP=3
	15400	LEAR	8	S	0232.6	0232.8	.5	10.0			QL=6 ST=2 TYP=3
	9400	TYKW	30	PBI	0234.0		15.0	5.0	2.0		
	9395	PEKG	3	S	0238.5	0239.6	2.5	18.5	4.0		
	17000	NOBE	20	GRF	0241.6	0242.3	6.0	9.0			0
	9400	TYKW	5	S	0242.0	0243.0	5.0	2.0	1.0		
	9400	TYKW	5	S	0303.0	0303.8U	1.0D	10.0	3.0D		
	8800	LEAR	8	S	0303.3	0303.8	1.8	15.0			QL=6 ST=2 TYP=3
	15400	LEAR	8	S	0303.5	0303.8	1.0	10.0			QL=6 ST=2 TYP=3
	3750	TYKW	5	S	0303.5	0303.9	1.5	3.0	1.0		
	9395	PEKG	45	C	0303.5	0308.5	18.5	18.0	5.6		
	4995	LEAR	8	S	0303.6	0303.8	1.0	8.0			QL=6 ST=2 TYP=3
	17000	NOBE	20	GRF	0303.6	0308.1	16.0	9.0			0
	9395	PEKG			0303.8			10.3			
	9400	TYKW	45	C	0307.0	0308.4	16.0	16.0	5.0		
	8800	LEAR	4	S/F	0307.6	0308.3	2.7	16.0			QL=6 ST=2 TYP=3
	9100	GORK	1	S	0307.7	0308.4	1.6	15.0			
	15400	LEAR	4	S/F	0307.8	0308.3	3.2	11.0			QL=6 ST=2 TYP=3
	2000	TYKW	45	C	0312.0	0313.4	10.0	3.0	.7		
	3750	TYKW	45	C	0312.0	0319.0	12.0	3.0	1.0		
	610	LEAR	8	S	0317.8	0318.3	1.0	27.0			QL=6 ST=2 TYP=3
	1000	TYKW	45	C	0318.0	0319.5	2.5	20.0	1.5		
	500	HIRA	42	SER	0332.5	0332.8	1.3	30.0			SL
	2950	GORK	21	GRF	0339.0	0530.0	236.0	16.0			
	2000	TYKW	45	C	0410.0	0412.1	8.0	43.0	9.0		
	3750	TYKW	45	C	0410.0	0412.1	10.0	72.0	9.0		
	1000	TYKW	45	C	0410.0	0412.3	6.0	16.0	4.0		
	3750	TYKW	21	GRF	0410.0	0425.0	45.0	6.0	3.0		
	2000	TYKW	21	GRF	0410.0	0425.0	55.0	3.0	1.5		
	610	LEAR	4	S/F	0410.0	0410.1	4.1	36.0			QL=6 ST=2 TYP=3
	650	GORK	4	S/F	0410.0	0410.2	6.1	21.0			
	500	HIRA	42	SER	0410.0	0411.2	2.0	100.0			WR
	9395	PEKG	45	C	0410.0	0412.2	12.0	36.1	7.6		
	2695	LEAR	47	GB	0410.6	0412.0	7.0	62.0			QL=6 ST=2 TYP=5
	4995	ATHN	47	GB	0410.6	0412.1	4.0	90.0			QL=2 ST=2 TYP=5
	15000	KISV	2	S/F	0410.6	0412.3	4.5	28.0			
	9100	GORK	21	GRF	0410.8	0417.8	17.8	12.0			
	2950	GORK	4	S/F	0410.9	0412.1	2.7	54.0	27.0		
	6100	KISV	4	S/F	0410.9	0412.3	2.5	43.0			
	9400	TYKW	45	C	0411.0	0411.9	11.0	40.0	7.0		
	9400	TYKW	21	GRF	0411.0	0425.0	40.0	6.0	3.0		
	8800	LEAR	47	GB	0411.0	0411.8	8.8	56.0			QL=6 ST=2 TYP=5
	4995	LEAR	47	GB	0411.0	0412.1	8.5	119.0			QL=6 ST=2 TYP=5
	15400	LEAR	4	S/F	0411.1	0411.8	8.5	23.0			QL=6 ST=2 TYP=3
	2695	PALE	47	GB	0411.1	0412.1	3.4	83.0			QL=6 ST=2 TYP=5
	1415	LEAR	4	S/F	0411.1	0412.1	2.5	28.0			QL=6 ST=2 TYP=3
	9100	GORK	3	S	0411.3	0411.8	1.7	40.0			
	950	GORK	4	S/F	0411.3	0412.2	4.7	11.0			
	17000	NOBE	20	GRF	0411.4	0412.3	16.0	19.0			R

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
24	8800	MANI	3	S	0411.5	0412.5	2.0	22.8	7.6		
	2695	MANI	3	S	0411.5	0412.5	6.0	57.0	19.0		
	4995	MANI	4	S/F	0411.5	0412.5	6.0	180.9	60.3		
	1415	PALE	8	S	0411.6	0412.1	2.0	37.0			QL=6 ST=2 TYP=3
	4995	PALE	47	GB	0411.6	0412.1	2.2	87.0			QL=6 ST=2 TYP=5
	1415	MANI	3	S	0411.6	0412.5	4.7	18.5	6.2		
	410	LEAR	47	GB	0412.6	0412.6	.2	82.0			QL=6 ST=2 TYP=5
	6100	KISV	29	PBI	0413.4	0413.6	27.0	6.0			
	4995	ATHN	4	S/F	0414.6	0416.0	3.5	15.0			QL=2 ST=2 TYP=3
	8800	ATHN	4	S/F	0414.6	0416.0	3.5	35.0			QL=2 ST=2 TYP=3
	2950	GORK	2	S/F	0415.2	0416.1	2.4	10.6	5.0		
	2695	PALE	8	S	0415.6	0416.0	1.9	33.0			QL=6 ST=2 TYP=3
	4995	PALE	8	S	0415.6	0416.0	1.9	36.0			QL=6 ST=2 TYP=3
	9100	GORK	3	S	0415.6	0416.1	1.0	30.0			
	6100	KISV	2	S/F	0415.6	0416.5	2.0	16.0			
	1000	TYKW	29	PBI	0416.0		45.0	1.0	.5		
	1415	MANI	47	GB	0419.7	0425.0	7.8	612.0	204.0		
	8800	MANI	3	S	0420.0	0424.6	6.5	167.2	55.7		
	4995	MANI	3	S	0420.3	0424.6	6.9	140.4	46.8		
	606	MANI	4	S/F	0420.6	0422.5	4.9	319.0	106.3		
	2695	MANI	3	S	0420.6	0425.0	5.9	234.0	78.0		
	9395	PEKG	3	S	0443.0	0444.8	3.0	21.8	2.5		
	15400	LEAR	8	S	0444.0	0444.8	1.3	24.0			QL=6 ST=2 TYP=3
	9100	GORK	1	S	0444.4	0444.8	1.2	26.0			
	15000	KISV	1	S	0444.4	0444.9	1.5	25.0			
	9400	TYKW	5	S	0444.5	0444.8	3.0	23.0	4.0		
	8800	LEAR	8	S	0444.6	0444.8	.2	17.0			QL=6 ST=2 TYP=3
	6100	KISV	1	S	0444.6	0444.9	1.0	3.0			
	17000	NOBE	1	S	0444.6	0444.9	1.0	23.0			L
	650	GORK	4	S/F	0505.6	0506.0	.5	17.0			
	9100	GORK	1	S	0506.7	0506.9	.8	6.0	3.0		
	2000	TYKW	45	C	0515.0	0524.1	20.0	50.0	12.0		
	3750	TYKW	45	C	0515.0	0524.1	15.0	72.0	21.0		
	650	GORK	23	GRF	0515.3	0554.0	75.5	3.5			
	6100	KISV	28	PRE	0516.0	0519.5	4.0	3.0			
	950	GORK	23	GRF	0517.2	0630.0	156.0	4.0			
	15000	KISV	4	S/F	0518.5	0524.5	8.0	74.0			
	1000	TYKW	47	GB	0519.0	0521.3	10.0	620.0	50.0		
	3100	CRIM	3	S	0519.0	0523.8	12.0	60.0	20.0		
	950	GORK	4	S/F	0519.6	0521.2	5.8	478.0			
	6100	KISV	45	C	0519.7	0524.5	7.0	88.0			
	9400	TYKW	45	C	0520.0	0524.5	8.0	108.0	39.0		
	2840	PEKG	45	C	0520.0	0524.1	14.0	50.6	15.1		
	11800	BERN	3	S	0520.0	0524.4	30.0U	117.0			
	8400	BERN	3	S	0520.0	0524.4	30.0U	147.0			
	19600	BERN	3	S	0520.0	0524.5	20.0U	63.0			
	17000	NOBE	1	S	0520.1	0524.5	40.0	47.0			R
	500	HIRA	45	C	0520.4	0524.0	5.0	200.0	50.0		SR
	2950	GORK	3	S	0520.5	0521.1	6.0	42.0			
	1415	LEAR	47	GB	0520.5	0521.3	4.6	139.0			QL=6 ST=2 TYP=5
	650	GORK	46	C	0520.5	0522.1	5.0	250.0			
	650	GORK			0520.5	0524.1		115.0			
	610	LEAR	47	GB	0520.6	0522.1	4.7	300.0			QL=6 ST=2 TYP=5
	4995	LEAR	47	GB	0520.6	0523.3	8.5	70.0			QL=6 ST=2 TYP=5
	9100	GORK	21	GRF	0520.7	0526.6	46.0	30.0			
	2695	LEAR	4	S/F	0521.0	0523.3	4.8	36.0			QL=6 ST=2 TYP=3
	9395	PEKG	4	S/F	0521.0	0524.5	31.0	105.0	16.3		
	8800	LEAR	47	GB	0521.5	0523.3	11.1	68.0			QL=6 ST=2 TYP=5
	200	HIRA	46	C	0521.6	0523.8	9.0	18.0	7.0		MR
	15400	LEAR	47	GB	0522.1	0523.3	15.0	32.0			QL=6 ST=2 TYP=5
	9100	GORK	4	S/F	0522.1	0524.5	4.2	87.0			
	100	GORK	4	S/F	0522.3	0523.6	4.2	640.0			
	100	HIRA	46	C	0522.6	0523.8	6.0	680.0	138.0		0
	410	LEAR	47	GB	0523.3	0524.1	1.0	84.0			QL=6 ST=2 TYP=5
	15000	KISV	29	PBI	0523.5	0527.0		32.0U			
	4995	ATHN	47	GB	0523.6	0529.0	44.7	90.0			QL=6 ST=3 TYP=5
	8800	ATHN	47	GB	0525.3	0529.0	27.0	110.0			QL=6 ST=3 TYP=5
	6100	KISV	29	PBI	0526.7	0527.0	50.0	19.0			
	9400	TYKW	30	PBI	0528.0		50.0	22.0	9.0		
	1000	TYKW	30	PBI	0529.0		70.0	2.0	1.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
24	3750	TYKW	29	PBI	0530.0		60.0	13.0	6.0		
	3100	CRIM	29	PBI	0531.0	0531.0	36.0	14.0	5.0		
	2000	TYKW	30	PBI	0535.0		90.0	7.0	3.0		
	2000	TYKW	5	S	0537.7	0538.0	1.0	1.5	.5		
	1000	TYKW	5	S	0537.8	0538.0	.5	4.0	1.0		
	1000	TYKW	5	S	0634.6	0634.8	.5	3.0	1.0		
	610	LEAR	8	S	0643.3	0643.5	.3	10.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0647.3	0647.5	.3	11.0			QL=6 ST=2 TYP=3
	1000	TYKW	45	C	0648.6	0649.4	1.0	4.0	1.0		
	6100	KISV	1	S	0658.8	0659.6	4.0	5.0			
	3750	TYKW	5	S	0659.0	0659.7	4.0	5.0	1.5		
	100	GORK	41	F	0705.4	0705.9	10.8	370.0D			
	100	GORK			0705.4	0715.3		370.0D			
	6100	KISV	1	S	0706.8	0707.2	3.0	5.0			
	3750	TYKW	5	S	0707.0	0707.2	1.0	4.0	1.0		
	3100	CRIM	26	FAL	0712.0	0824.0		10.0			
	3750	TYKW	32	ABS	0716.0	0820.0	115.0D	-6.0	-3.5D		
	1415	LEAR	8	S	0749.8	0749.8	.2	40.0			QL=6 ST=2 TYP=3
	6100	KISV	20	GRF	0855.0	0903.5	60.0	6.0			
	430	KRAK	40	F	0855.2	0855.5	.8	110.0			
	500	HIRA	45	C	0855.6	0856.7	1.3	225.0	60.0		SL
	610	LEAR	47	GB	0855.6	0856.8	1.5	60.0			QL=6 ST=2 TYP=5
	536	ONDR	41	F	0856.0	0857.2	1.7	103.0	73.0		
	410	LEAR	8	S	0856.3	0856.5	.2	40.0			QL=6 ST=2 TYP=3
	6100	KISV	8	S	0910.4	0910.5	.4	6.0			
	2000	TYKW	45	C	0916.0	0916.4	1.0	48.0	6.0		
	2650	DWIN	2	S/F	0916.0	0916.0	1.0	40.0	20.0		
	2950	GORK	2	S/F	0916.3	0916.7	.8	16.0			
	204	IZMI	41	F	0916.4	0916.7	.8	196.0			
	3100	CRIM	26	FAL	0924.0	1100.0		10.0			
	204	IZMI	4	S/F	0935.0	0935.2	1.6	148.0	48.0		
	127	TORN	8	S	1006.4	1007.2	1.5	240.0	120.0		
	536	ONDR	8	S	1032.7	1032.8	.1	9.0			
	2950	GORK	1	S	1128.8	1129.0	1.9	6.7	3.0		
	2800	OTTA	1	S	1129.0	1129.2	1.5	6.0	2.6		
	536	ONDR	8	S	1149.4	1149.5	.2	34.0			
	2800	OTTA	240	R	1150.0	1250.0	60.0	4.0	2.0		
	930	BORD	8	S	1214.0	1214.0	.2	19.0	2.0		
	536	ONDR	8	S	1215.8	1215.8	.1	18.0			
	930	BORD	41	F	1246.3	1246.6	.7	18.0	2.0		
	2800	OTTA	20	GRF	1340.0	1455.0	200.0	6.0	3.6		
	9400	HUAN	20	GRF	1402.7	1408.6	15.8	4.8	3.2		0
	930	BORD	46	C	1448.0	1448.4	1.4	25.0	2.0		
	245	SGMR	8	S	1723.1	1723.3	.5	49.0			QL=6 ST=2 TYP=3
	2800	OTTA	1	S	1725.0	1726.2	2.0	2.6	1.3		
	930	BORD	41	F	1732.4	1732.7	.5	30.0	2.0		
	2800	OTTA	21	GRF	1900.0	2305.0	360.0D	29.0			
	2800	OTTA	46F	C	1913.5	1926.6	60.0	74.0	26.0		
	2695	SGMR	20	GRF	1923.8	1926.3	4.8	50.0			QL=6 ST=2 TYP=2
	1415	SGMR	20	GRF	1924.0	1926.6	17.8	59.0			QL=6 ST=2 TYP=2
	9400	HUAN	21	GRF	1924.4	1957.0	52.6	20.6	9.5		L
	4995	SGMR	20	GRF	1926.0	1927.8	1.8D	50.0			QL=6 ST=2 TYP=2
	410	SGMR	20	GRF	1930.6	1930.8	.2	13.0			QL=6 ST=2 TYP=2
	245	SGMR	20	GRF	1930.6	1930.8	1.2	23.0			QL=6 ST=2 TYP=2
	200	HIRA	41	F	1939.0	1955.0	27.0	28.0			WR
	610	SGMR	20	GRF	1940.1	1940.3	1.7	21.0			QL=6 ST=2 TYP=2
	9400	HUAN	2	S/F	1940.2	1943.8	5.4	19.0	10.9		L
	2695	PALE	4	S/F	1940.3	1943.6	5.7	49.0			QL=6 ST=2 TYP=3
	1415	PALE	47	GB	1940.3	1943.8	6.8	89.0			QL=6 ST=2 TYP=5
	410	PALE	4	S/F	1941.3	1943.5	4.8	26.0			QL=6 ST=2 TYP=3
	245	PALE	4	S/F	1941.5	1942.1	5.0	40.0			QL=6 ST=2 TYP=3
	4995	PALE	4	S/F	1941.5	1943.6	3.6	23.0			QL=6 ST=2 TYP=3
	1415	SGMR	20	GRF	1942.5	1943.6	17.1	110.0			QL=6 ST=2 TYP=2
	4995	SGMR	20	GRF	1942.5	1943.6	3.6	30.0			QL=6 ST=2 TYP=2
	2695	SGMR	20	GRF	1942.5	1943.6	2.3	47.0			QL=6 ST=2 TYP=2
	410	SGMR	20	GRF	1942.5	1944.6	2.8	41.0			QL=6 ST=2 TYP=2
	610	SGMR	20	GRF	1942.6	1943.6	2.0	30.0			QL=6 ST=2 TYP=2
	8800	SGMR	20	GRF	1942.6	1943.6	1.2	22.0			QL=6 ST=2 TYP=2
	245	SGMR	20	GRF	1943.0	1944.6	7.8	29.0			QL=6 ST=2 TYP=2
	2800	OTTA	20	GRF	2035.0	2100.0	40.0	6.4	3.6		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
24	9400	HUAN	21	GRF	2044.2	2100.0	39.5	7.9	4.8		0
	245	SGMR	8	S	2102.3	2102.5	.3	30.0			QL=6 ST=2 TYP=3
	9400	HUAN	1	S	2108.4	2108.9	2.2	9.5	6.3		0
	9400	TYKW	5	S	2116.0	2116.6	1.5	14.0	4.0		
	1000	TYKW	45	C	2135.5	2137.9	4.0	6.0	1.5		
	2000	TYKW	21	GRF	2200.0	2340.0	215.0	9.0	5.0		
	3750	TYKW	28	PRE	2220.0	2252.0	32.0	4.0	2.0		
	1000	TYKW	45	C	2224.3	2226.1	2.5	3.0	1.0		
	9400	TYKW	5	S	2230.0	2237.0	15.0	5.0	2.0		
	1000	TYKW	21	GRF	2245.0	2345.0	160.0	2.0	1.0		
	9400	TYKW	45	C	2249.0	2258.1	13.0	19.0	9.0		
	2000	TYKW	5	S	2252.0	2258.8	11.0	18.0	7.0		
	3750	TYKW	5	S	2252.0	2258.8	10.0	24.0	12.0		
	1000	TYKW	45	C	2253.0	2257.2	8.0	60.0	10.0		
	2800	OTTA	3	S	2253.0	2259.0	9.0	15.6	6.0		
	8800	PALE	4	S/F	2254.1	2255.1	14.0	24.0			QL=6 ST=2 TYP=3
	2695	SGMR	4	S/F	2256.6	2258.3	2.5	22.0			QL=6 ST=2 TYP=3
	500	HIRA	45	C	2257.0	2258.0	4.0	10.0	4.0		SR
	1415	SGMR	8	S	2257.0	2258.1	1.3	34.0			QL=6 ST=2 TYP=3
	4995	PALE	4	S/F	2257.1	2258.1	3.2	26.0			QL=6 ST=2 TYP=3
	1415	PALE	4	S/F	2257.1	2258.3	3.0	34.0			QL=6 ST=2 TYP=3
	2695	PALE	4	S/F	2257.1	2258.8	3.0	23.0			QL=6 ST=2 TYP=3
	100	HIRA	46	C	2258.3	2258.5	1.2	760.0	180.0		WL
	200	HIRA	46	C	2259.3	2300.0	1.0	30.0	17.0		0
	1000	TYKW	29	PBI	2301.0		15.0	2.0	1.0		
	3750	TYKW	30	PBI	2302.0		220.0	12.0	6.0		
	9400	TYKW	30	PBI	2302.0		110.0	12.0	4.0		
	2000	TYKW	30	PBI	2303.0		30.0	6.0	3.0		
	3750	TYKW	28	PRE	2308.0	0308.6	2.0	3.0	2.0		
	2000	TYKW	5	S	2309.0	2311.0	6.0	1.5	.5		
	8800	PALE	4	S/F	2309.3	2310.3	3.3	32.0			QL=6 ST=2 TYP=3
	9400	TYKW	5	S	2309.5	2311.0	10.0	8.0	3.0		
	3750	TYKW	45	C	2310.0	2311.1	5.0	11.0	5.0		
	2695	PENT	1	S	2310.0	2311.0	4.5	6.0	2.6		
	4995	PALE	4	S/F	2310.0	2311.0	2.3	23.0			QL=6 ST=2 TYP=3
	1000	TYKW	45	C	2322.0	2323.7	4.5	10.0	1.5		
	3750	TYKW	5	S	2322.0	2324.5	6.0	2.0	1.0		
	2000	TYKW	5	S	2323.0	2323.7	4.0	3.0	1.5		
	2695	PENT	1	S	2323.0	2324.5	4.0	3.4	1.7		
	245	LEAR	47	GB	2337.1	2338.6	1.5	400.0			QL=6 ST=2 TYP=5
	245	LEAR	8	S	2341.0	2341.1	.1	45.0			QL=6 ST=2 TYP=3
	2000	TYKW	5	S	2357.0	2359.3	5.5	2.0	1.0		
	1000	TYKW	45	C	2358.0	2359.1	2.00	4.0	2.00		
25	100	GORK	44	NS	0300.0E		360.00		5.0		
	200	GORK	44	NS	0300.0E		526.00		5.0		
	260	ONDR	44	NS	0540.0E	1232.0U	530.00	18.0			
	200	HIRA	44	NS	1918.0E	2114.0	240.00	10.0	5.0		0
	208	VORO	44	NS	2100.0E		250.00		4.0		
	1000	TYKW	45	C	0007.5	0008.7	2.5	2.0	.5		
	1000	TYKW	42	SER	0020.5	0023.9	8.5	28.0	2.5		
	2000	TYKW	5	S	0021.7	0022.2	1.0	1.0	.3		
	3750	TYKW	31	ABS	0030.0	0048.0	95.0	-4.0	-2.0		
	2000	TYKW	5	S	0138.0	0138.8	4.0	2.0	.1		
	1000	TYKW	45	C	0138.0	0139.0	7.0	4.5	1.5		
	500	HIRA	5	S	0138.0	0140.0	5.3	2.0	1.0		WR
	610	LEAR	8	S	0151.8	0152.1	.3	40.0			QL=6 ST=2 TYP=3
	245	LEAR	47	GB	0228.8	0229.0	.3	98.0			QL=6 ST=2 TYP=5
	3750	TYKW	21	GRF	0320.0	0331.0	100.0	6.0	2.0		
	2000	TYKW	21	GRF	0325.0	0330.5	70.0	3.0	1.0		
	2000	TYKW	45	C	0327.9	0328.1	.5	19.0	6.0		
	2000	TYKW	20	GRF	0343.0	0345.0	30.0	1.5	.5		
	3750	TYKW	20	GRF	0405.0	0410.0	35.0	2.0	1.0		
	1000	TYKW	45	C	0457.0	0458.6	3.0	4.0	.5		
	650	GORK	40	F	0457.6	0458.6	1.2	8.0			
	9400	TYKW	5	S	0506.7	0507.0	1.0	3.0	1.0		
	8800	LEAR	8	S	0506.8	0507.0	.3	5.0			QL=6 ST=2 TYP=3
	15400	LEAR	8	S	0506.8	0507.0	.5	17.0			QL=6 ST=2 TYP=3
	4995	ATHN	4	S/F	0518.3	0531.3	57.8	46.0			QL=6 ST=2 TYP=3
	8800	ATHN	4	S/F	0522.5	0531.6	53.6	38.0			QL=6 ST=2 TYP=3

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
25	3750	TYKW	45	C	0527.0	0531.3	11.0	41.0	12.0		
	2840	PEKG	45	C	0527.0	0531.5	10.0	48.7	13.3		
	2840	PEKG			0527.0	0535.3		40.6			
	2950	GORK	21	GRF	0527.0	0537.4	56.2	10.0			
	2000	TYKW	45	C	0528.0	0531.7	12.0	37.0	12.0		
	1000	TYKW	45	C	0528.0	0532.3	10.0	30.0	8.0		
	500	HIRA	5	S	0528.3	0532.0	7.0	5.0	3.0		WR
	100	HIRA	41	F	0528.4	0530.3	7.0	970.0			0
	100	GORK	48	C	0528.5	0529.0	6.8	170.0D			
	100	GORK			0528.5	0531.0		630.0			
	200	GORK	40	F	0528.5	0538.0	9.9U	26.0			
	950	GORK	3	S	0528.8	0532.3	7.0	25.0			
	3100	CRIM	3	S	0528.9	0531.4	5.0	47.0	16.0		
	9400	TYKW	45	C	0529.0	0531.2	21.0	12.0	9.0		
	9395	PEKG	20	GRF	0529.0	0531.5	40.0	13.4	5.6		
	2695	LEAR	4	S/F	0530.0	0531.3	6.3	48.0			QL=6 ST=2 TYP=3
	2950	GORK	3	S	0530.0	0531.5	3.4	29.0			
	650	GORK	22	GRF	0530.0	0531.6	12.0	15.0			
	9100	GORK	20	GRF	0530.0	0531.6	21.0	15.0			
	4995	LEAR	4	S/F	0530.1	0531.1	5.7	33.0			QL=6 ST=2 TYP=3
	6100	KISV	4	S/F	0530.1	0531.3	4.0	19.0			
	1415	LEAR	4	S/F	0530.1	0532.1	5.5	41.0			QL=6 ST=2 TYP=3
	8800	LEAR	4	S/F	0530.3	0531.5	5.3	16.0			QL=6 ST=2 TYP=3
	15400	LEAR	4	S/F	0530.5	0534.6	4.6	11.0			QL=6 ST=2 TYP=3
	610	LEAR	4	S/F	0531.0	0531.6	4.1	19.0			QL=6 ST=2 TYP=3
	3100	CRIM	30	PBI	0533.9	0533.9	9.0	13.0	4.0		
	6100	KISV	29	PBI	0534.1	0534.5	25.0	7.0			
	3100	CRIM	1	S	0534.8	0535.0	1.0	19.0	6.0		
	6100	KISV	1	S	0535.0	0535.2	1.5	4.0			
	2950	GORK	3	S	0535.0	0535.3	1.0	16.0			
	2840	PEKG	29	PBI	0537.0		28.0	9.0	4.6		
	1000	TYKW	29	PBI	0538.0		7.0	1.0	.5		
	3750	TYKW	30	PBI	0538.0		50.0	9.0	3.5		
	2000	TYKW	30	PBI	0540.0		55.0	3.0	1.5		
	1000	TYKW	45	C	0545.0	0548.6	13.0	2.0	.7		
	2000	TYKW	5	S	0548.0	0549.1	15.0	2.0	.5		
	3750	TYKW	5	S	0548.0	0550.0	5.0	1.5	.5		
	9400	TYKW	29	PBI	0550.0		40.0	8.0	4.0		
	650	GORK	1	S	0613.6	0613.7	.4	3.5			
	1000	TYKW	45	C	0613.6	0613.8	.6	3.0	1.0		
	3750	TYKW	21	GRF	0646.0	0725.0	80.0	3.0	1.5		
	9400	TYKW	20	GRF	0647.0	0650.0	45.0	3.0	1.5		
	2000	TYKW	20	GRF	0647.0	0700.0	110.0	2.0	1.0		
	650	GORK	8	S	0647.3	0647.3	.2	6.5	3.0		
	3750	TYKW	5	S	0745.0	0750.0	20.0	1.5	.5		
	3750	TYKW	20	GRF	0810.0	0815.0	40.0	2.0	1.0		
	245	LEAR	8	S	0920.0	0920.1	.1	19.0			QL=6 ST=2 TYP=3
	3100	CRIM	3	S	0956.0	0957.0	5.0	29.0	10.0		
	11800	BERN	3	S	0956.7	0957.1	3.0U	8.0			
	8400	BERN	41	F	0956.7	0957.1	4.0U	44.0			
	6100	KISV	45	C	0956.7	0957.2	5.0	33.0			
	6100	KISV			0956.7	0959.1		14.0			
	9100	GORK	21	GRF	0956.7	1049.8	53.1U	23.0			
	2950	GORK	3	S	0956.8	0957.2	1.0	23.0			
	9100	GORK	4	S/F	0956.9	0957.1	2.7	34.0			
	15000	KISV	1	S	0956.9	0957.2	1.0	11.0			
	2650	DWIN	1	S	0957.0	0957.0	2.0	25.0	10.0		
	930	BORD	41	F	0957.0	0957.2	.2	38.0	1.0		
	2950	GORK	29	PBI	0957.8	0957.8	45.0	10.0			
	29	UPIC	4	S/F	0958.0	0959.0	2.6				
	6100	KISV	28	PRE	1041.0	1042.0	4.0	4.0			
	3100	CRIM	3	S	1044.5	1045.5	8.0	46.0	15.0		
	6100	KISV			1045.5	1046.5		46.0			
	6100	KISV			1045.5	1047.2		54.0			
	11800	BERN	4	S/F	1045.5	1047.6	8.0	158.0			
	8400	BERN	4	S/F	1045.5	1047.6	8.0	133.0			
	6100	KISV	46	C	1045.5	1047.6	5.5	64.0			
	6100	KISV			1045.5	1048.0		56.0			
	2950	GORK	4	S/F	1045.6	1046.6	3.0	38.0			
	4995	SGMR	47	GB	1045.6	1047.5	5.4	72.0			QL=6 ST=2 TYP=5

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
25	8800	SGMR	47	GB	1045.6	1047.5	5.7	119.0			QL=6 ST=2 TYP=5
	2695	SGMR	4	S/F	1045.8	1047.5	2.8	42.0			QL=6 ST=2 TYP=3
	2650	DWIN	2	S/F	1046.0	1046.0	5.0	35.0	15.0		
	15000	KISV			1046.0	1046.7		52.0			
	3000	IZMI	5	S	1046.0	1047.0	3.5	38.0	24.0		
	9100	GORK	4	S/F	1046.0	1047.5	3.4	120.0			
	15000	KISV	46	C	1046.0	1047.7	5.0	133.0			
	15000	KISV			1046.0	1048.0		120.0			
	15400	SGMR	47	GB	1046.1	1047.6	2.7	180.0			QL=6 ST=2 TYP=5
	2950	GORK	29	PBI	1048.6	1048.7	71.0D	145.0			
	6100	KISV	29	PBI	1051.0	1051.0	7.0	9.0			
	930	BORD	8	S	1353.0	1353.0	.1	90.0	1.0		
	245	SGMR	8	S	1640.1	1640.3	.4	28.0			QL=6 ST=2 TYP=3
	410	SGMR	8	S	1645.1	1645.1	.2	13.0			QL=6 ST=2 TYP=3
	930	BORD	46	C	1655.0	1657.3	2.8	28.0	2.0		
	410	SGMR	8	S	1655.5	1655.8	1.5	25.0			QL=6 ST=2 TYP=3
	2800	OTTA	1	S	1655.5	1655.9	1.0	5.4	2.7		
	245	SGMR	8	S	1655.6	1655.8	.2	32.0			QL=6 ST=2 TYP=3
	610	SGMR	8	S	1655.6	1655.8	.4	28.0			QL=6 ST=2 TYP=3
	2800	OTTA	29	PBI	1656.5	1656.5	14.0	2.4	1.2		
	9400	HUAN	21	GRF	1923.3	1942.4	43.2	8.4	4.4		0
	2800	OTTA	21	GRF	1939.0	1942.0	11.0	3.6	2.5		
	9400	HUAN	2	S/F	1943.4	1944.5	2.6	18.4	9.7		L
	2800	OTTA	3	S	1943.5	1944.3	1.8	51.0	25.0		
	4995	SGMR	47	GB	1943.6	1944.1	1.2	64.0			QL=6 ST=2 TYP=5
	2695	SGMR	8	S	1943.6	1944.3	1.0	40.0			QL=6 ST=2 TYP=3
	4995	PALE	47	GB	1943.8	1944.1	2.0	80.0			QL=6 ST=2 TYP=5
	1415	PALE	8	S	1943.8	1944.3	2.0	30.0			QL=6 ST=2 TYP=3
	2695	PALE	47	GB	1943.8	1944.3	1.8	51.0			QL=6 ST=2 TYP=5
	1415	SGMR	8	S	1943.8	1944.5	1.0	30.0			QL=6 ST=2 TYP=3
	8800	SGMR	8	S	1943.8	1944.6	.8	23.0			QL=6 ST=2 TYP=3
	610	PALE	47	GB	1943.8	1945.3	1.8	160.0			QL=6 ST=2 TYP=5
	200	HIRA	42	SER	1944.0	1945.7	2.6	1300.0			WR
	410	PALE	47	GB	1944.1	1945.5	1.5	100.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	1944.6	1946.0	2.5	490.0			QL=6 ST=2 TYP=5
	2800	OTTA	31	ABS	1950.0	2015.0	50.0	-5.0	-3.0		
	2800	OTTA	22	GRF	2050.0	2100.0	25.0	3.0	1.5		
	8800	SGMR	8	S	2055.8	2056.0	.2	19.0			QL=6 ST=2 TYP=3
	2695	SGMR	8	S	2055.8	2056.0	.2	17.0			QL=6 ST=2 TYP=3
	9400	TYKW	5	S	2118.0	2118.7	4.0	15.0	3.0		
	9400	TYKW	28	PRE	2127.0	2131.0	4.0	8.0	4.0		
	3750	TYKW	45	C	2129.0	2134.5	15.0	340.0	100.0		
	2000	TYKW	45	C	2130.0	2134.6	14.0	295.0	85.0		
	9400	TYKW	47	GB	2131.0	2134.3	11.0	680.0	180.0		RAIN
	1000	TYKW	45	C	2131.0	2136.8	13.0	270.0	70.0		
	2800	OTTA	4	S/F	2131.0	2134.6	14.0	320.0	105.0		
	8800	SGMR	47	GB	2131.1	2134.1	11.4	590.0			QL=6 ST=2 TYP=5
	9400	HUAN	47	GB	2131.1	2135.0	8.5	503.9	209.7		L
	4995	SGMR	47	GB	2131.6	2134.1	11.2	380.0			QL=6 ST=2 TYP=5
	15400	SGMR	49	GB	2131.8	2134.1	11.2	890.0			QL=6 ST=2 TYP=6
	2695	SGMR	47	GB	2131.8	2134.3	11.0	300.0			QL=6 ST=2 TYP=5
	1415	SGMR	47	GB	2131.8	2135.8	10.5	260.0			QL=6 ST=2 TYP=5
	1415	PALE	47	GB	2132.3	2135.8	9.5	219.0			QL=6 ST=2 TYP=5
	200	HIRA	46	C	2132.4		16.3	75.0D	30.0D		WR
	100	HIRA	46	C	2132.6	2134.3	8.0	630.0	98.0		WL
	500	HIRA	45	C	2132.7	2137.3	13.0	150.0	40.0		SR
	2695	PALE	47	GB	2132.8	2134.5	8.0	239.0			QL=6 ST=2 TYP=5
	17000	NOBE	7	C	2132.9	2134.3	6.0	445.0			L
	4995	PALE	47	GB	2133.0	2134.3	8.5	390.0			QL=6 ST=2 TYP=5
	8800	PALE	49	GB	2133.1	2134.3	6.5	600.0			QL=6 ST=2 TYP=6
	610	SGMR	47	GB	2133.1	2135.1	8.9	139.0			QL=6 ST=2 TYP=5
	610	PALE	47	GB	2133.5	2135.3	8.5	139.0			QL=6 ST=2 TYP=5
	15400	PALE	47	GB	2134.1	2134.3	1.4	360.0			QL=6 ST=2 TYP=5
	410	SGMR	47	GB	2134.5	2135.5	5.0	29.0			QL=6 ST=2 TYP=5
	410	PALE	47	GB	2135.3	2136.1	4.5	31.0			QL=6 ST=2 TYP=5
	245	PALE	47	GB	2136.3	2144.1	12.0	180.0			QL=6 ST=2 TYP=5
	9400	HUAN	29	PBI	2139.6	2139.6	42.4	91.2	47.0		L
	208	VORO	4		2140.0	2145.0	9.0	135.0			
	245	SGMR	47	GB	2141.6	2144.0	7.0	11.0			QL=6 ST=2 TYP=5
	9400	TYKW	29	PBI	2142.0		90.0	42.0	12.0U		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
25	3750	TYKW	29	PBI	2144.0		120.0	28.0	8.0		
	1000	TYKW	30	PBI	2144.0		20.0	5.0	2.0		
	2000	TYKW	29	PBI	2144.0		120.0	15.0	5.0		
	2800	OTTA	29	PBI	2145.0	2145.0	95.0	25.0	9.0		
	1000	TYKW	5	S	2159.8	2200.1	.6	3.0	1.0		
	1000	TYKW	5	S	2226.6	2226.9	.8	4.5	1.0		
26	245	LEAR	43	NS	0701.8	0715.8	51.0	15.0			QL=6 ST=2 TYP=1
	8800	LEAR	4	S/F	0014.6	0014.8	2.7	13.0			QL=6 ST=2 TYP=3
	15400	LEAR	4	S/F	0014.8	0015.6	2.5	11.0			QL=6 ST=2 TYP=3
	245	LEAR	8	S	0027.1	0028.6	2.0	22.0			QL=6 ST=2 TYP=3
	410	LEAR	8	S	0027.8	0028.5	1.0	11.0			QL=6 ST=2 TYP=3
	610	LEAR	8	S	0027.8	0028.6	.8	6.0			QL=6 ST=2 TYP=3
	9400	TYKW	28	PRE	0032.5	0040.0	10.5	6.0	2.5		
	1000	TYKW	5	S	0033.4	0033.7	.7	3.0	1.0		
	9395	PEKG	46	C	0042.0	0046.3	19.0	287.0	112.0		
	2840	PEKG	46	C	0042.0	0049.3	22.0	148.0	60.3		
	9395	PEKG			0042.0	0049.5		227.0			
	2840	PEKG			0042.0	0055.4		151.0			
	9395	PEKG			0042.0	0055.4		187.0			
	9400	TYKW	45	C	0043.0	0046.4	16.0	325.0	110.0		RAIN
	3750	TYKW	45	C	0043.0	0053.8	35.0	204.0	40.0		
	2000	TYKW	5	S	0043.0	0043.2	.5	2.0	.5		
	2930	VORO	42	SER	0043.0	0055.0	17.0	218.0			
	17000	NOBE	7	C	0043.4	0050.0	19.0	314.0			L
	8800	PALE	47	GB	0043.8	0046.3	13.8	370.0			QL=3 ST=2 TYP=5
	2000	TYKW	45	C	0044.0	0049.4	23.0	146.0	40.0		
	8800	MANI	22	GRF	0044.0	0047.0	14.5	351.5	117.2		
	2695	PENT	46F	C	0044.0	0049.5	21.0	182.0	69.4		
	4995	MANI	22	GRF	0044.0	0054.5	14.5	347.9	116.0		
	15400	PALE	47	GB	0044.1	0045.8		300.0			QL=3 ST=3 TYP=5
	4995	PALE	47	GB	0044.1	0046.3	13.5	180.0			QL=3 ST=2 TYP=5
	1000	TYKW	45	C	0044.5	0053.9	22.5	126.0	18.0		
	2695	PALE	47	GB	0045.8	0047.8	11.8	169.0			QL=3 ST=2 TYP=5
	2695	MANI	22	GRF	0046.0	0050.0	12.5	166.6	55.5		
	1415	LEAR	47	GB	0046.1	0057.8	13.0	180.0			QL=6 ST=2 TYP=5
	1415	PALE	47	GB	0046.3	0047.8	11.3	64.0			QL=3 ST=2 TYP=5
	35000	NAGO	5	S	0048.0	0050.0	3.0	85.0			
	1415	MANI	22	GRF	0048.0	0050.4	10.5	213.4	71.1		
	500	HIRA	45	C	0049.1	0053.4	16.6	400.0	40.0		WR
	610	PALE	8	S	0049.5	0050.0	1.6	20.0			QL=3 ST=2 TYP=3
	410	LEAR	47	GB	0052.0	0053.8	6.1	380.0			QL=6 ST=2 TYP=5
	245	LEAR	4	S/F	0052.0	0054.1	6.8	40.0			QL=6 ST=2 TYP=3
	606	MANI	4	S/F	0052.8	0054.5	5.7	174.0	58.0		
	410	PALE	47	GB	0053.3	0053.8	4.3	320.0			QL=3 ST=2 TYP=5
	9400	TYKW	30	PBI	0059.0		180.0U	10.0	5.0U		
	9400	TYKW	5	S	0101.0	0101.4	4.0	10.0	4.0		
	9395	PEKG	29	PBI	0101.0	0101.7	16.0	15.3	8.9		
	2840	PEKG	29	PBI	0104.0		16.0	14.3	6.0		
	2695	PENT	29	PBI	0105.0	0105.0	23.0	14.6	7.3		
	1000	TYKW	30	PBI	0107.0		13.0	2.0	1.0		
	2000	TYKW	30	PBI	0107.0		240.0	6.0	3.0		
	2000	TYKW	31	ABS	0115.0	0130.0	45.0	-8.0	-4.5		
	9400	TYKW	31	ABS	0115.0	0132.0	40.0	-17.0	-10.0		
	3750	TYKW	31	ABS	0118.0	0135.0	37.0	-13.0	-8.5		
	1000	TYKW	31	ABS	0120.0	0130.0	40.0	-2.0	-1.0		
	2695	PENT	31	ABS	0122.0	0135.0	30.0	7.2	4.4		
	3750	TYKW	21	GRF	0155.0	0207.0	95.0	15.0	7.0		
	9400	TYKW	21	GRF	0200.0	0215.0	90.0U	12.0	6.0U		
	2000	TYKW	21	GRF	0200.0	0217.0	120.0	7.0	3.5		
	3750	TYKW	45	C	0205.0	0208.2	5.0	37.0	8.0		
	1000	TYKW	21	GRF	0205.0	0315.0	180.0	3.0	1.5		
	9395	PEKG	21	GRF	0205.0	0207.5	25.0	7.6	6.2		
	2840	PEKG	45	C	0205.0	0208.3	25.0	28.8	5.0		
	4995	LEAR	4	S/F	0205.8	0208.1	3.0	49.0			QL=6 ST=2 TYP=3
	2000	TYKW	45	C	0205.8	0208.3	5.0	24.0	5.0		
	9400	TYKW	45	C	0206.0	0208.3	7.0	21.0	4.0		
	2695	LEAR	4	S/F	0206.0	0208.1	2.8	40.0			QL=6 ST=2 TYP=3
	8800	LEAR	4	S/F	0206.5	0208.1	4.0	38.0			QL=6 ST=2 TYP=3
	1000	TYKW	5	S	0207.0	0208.3	2.5	1.5	.5		

SOLAR RADIO EMISSION
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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
26	15400	LEAR	8	S	0207.1	0208.1	1.2	20.0			QL=6 ST=2 TYP=3
	17000	NOBE	1	S	0207.9	0208.5	3.0	14.0			0
	9395	PEKG	3	S	0208.0	0208.3	1.0	22.9	9.2		
	1415	LEAR	8	S	0208.1	0208.3	.2	11.0			QL=6 ST=2 TYP=3
	1000	TYKW	5	S	0346.5	0346.7	.5	4.0	1.0		
	1000	TYKW	8	S	0410.8	0410.9	.2	42.0	10.0		
	1000	TYKW	45	C	0519.2	0519.4	.7	17.0	3.0		
	3750	TYKW	20	GRF	0540.0	0610.0	100.0	3.0	1.5		
	9400	TYKW	20	GRF	0545.0	0615.0	100.0U	4.0	2.0U		RAIN
	2000	TYKW	5	S	0653.0	0655.0	5.0	4.0	1.0		
	100	GORK	4	S/F	0654.0	0655.2	2.6	740.0D			
	930	BORD	8	S	0724.0	0724.1	.2	53.0	1.0		
	1000	TYKW	8	S	0724.0	0724.1	.2	41.0	10.0		
	808	ONDR	8	S	0724.3	0724.3	.1	22.0			
	1000	TYKW	8	S	0730.0	0730.1	.3	38.0	8.0		
	930	BORD	8	S	0730.1	0730.1	.1	63.0	1.0		
	100	GORK	41	F	0741.3	0741.3	6.0	2200.0D			
	100	GORK			0741.3	0750.0		2200.0D			
	3750	TYKW	45	C	0918.0	0920.4	5.0	28.0	8.0		RAIN
	950	GORK	1	S	0918.0	0919.8	4.3	4.0			
	2950	GORK	3	S	0918.0	0922.2	6.8	21.0			
	6100	KISV	46	C	0918.5	0920.6	6.0	19.0			
	6100	KISV			0918.5	0921.5		11.0			
	6100	KISV			0918.5	0922.1		5.0			
	8800	ATHN	4	S/F	0918.6	0920.3	4.7	29.0			QL=6 ST=2 TYP=3
	2695	ATHN	4	S/F	0918.8	0920.3	5.5	15.0			QL=6 ST=2 TYP=3
	2650	DWIN	1	S	0919.0	0919.0	5.0	20.0	10.0		
	3000	IZMI	5	S	0919.0	0920.0	3.0	33.0	15.0		
	4995	ATHN	4	S/F	0919.0	0920.3	3.8	23.0			QL=6 ST=2 TYP=3
	9395	PEKG	45	C	0919.0	0920.6	5.0	22.3	9.8		
	2840	PEKG	4	S/F	0919.0	0920.6	5.0	21.6	6.2		
	100	GORK	46	C	0919.1	0921.3	4.3	2200.0D			
	100	GORK			0919.1	0922.7		2200.0D			
	9100	GORK	2	S/F	0919.3	0920.4	4.2	22.0			
	8800	LEAR	8	S	0919.3	0920.6	1.8	30.0			QL=5 ST=2 TYP=3
	15400	LEAR	4	S/F	0919.3	0921.3	3.3	18.0			QL=5 ST=2 TYP=3
	650	GORK	1	S	0919.6	0921.0	6.8	4.0	2.0		
	200	GORK	2	S/F	0919.7	0920.4	4.5	10.0			
	2695	LEAR	8	S	0919.8	0920.1	.5	22.0			QL=5 ST=2 TYP=3
	4995	LEAR	8	S	0919.8	0920.1	.8	34.0			QL=5 ST=2 TYP=3
	29	UPIC	46	C	0919.8	0921.9	4.4				
	4995	ATHN	47	GB	0938.3	0940.0	4.8	150.0			QL=6 ST=2 TYP=5
	100	GORK	46	C	0938.5	0939.5	4.1	2200.0D			
	6100	KISV	4	S/F	0938.5	0940.3	3.5	131.0			
	100	GORK			0938.5	0941.7		23800.0D			
	2695	ATHN	47	GB	0938.8	0940.6	4.5	84.0			QL=6 ST=2 TYP=5
	2950	GORK	3	S	0939.0	0940.4	5.0	90.0			
	2840	PEKG	45	C	0939.0	0940.5	6.0	87.4	13.6		
	9395	PEKG	46	C	0939.0	0940.5	6.0	93.1	14.1		
	3000	IZMI	5	S	0939.0	0940.5	4.0	120.0	66.0		
	950	GORK	45	C	0939.0	0940.9	4.5	21.0			
	650	GORK	46	C	0939.0	0941.0	5.1	46.0			
	2650	DWIN	4	S/F	0939.0	0941.0	5.0	82.0	40.0		
	930	BORD	46	C	0939.0	0941.0	5.0	38.0	6.0		
	650	GORK			0939.0	0942.8		52.0			
	950	GORK			0939.0	0942.8		18.0			
	8800	ATHN	47	GB	0939.3	0940.1	3.8	100.0			QL=6 ST=2 TYP=5
	9100	GORK	3	S	0939.4	0940.2	1.9	100.0			
	1415	ATHN	4	S/F	0939.5	0940.3	4.6	26.0			QL=6 ST=2 TYP=3
	808	ONDR	45	C	0939.8	0941.0	4.9	25.0	18.0		
	2695	MANI	3	S	0939.8	0941.0	2.2	88.5	29.5		
	29	UPIC	46	C	0939.8	0942.3	3.6				
	200	GORK	2	S/F	0939.9	0941.6U	4.5	40.0D			
	4995	MANI	3	S	0940.0	0941.0	2.0	93.4	31.2		
	204	IZMI	46	C	0940.0	0941.2	3.5	760.0	150.0		
	245	SGMR	47	GB	0940.3	0942.5	2.8	110.0			QL=4 ST=2 TYP=5
	536	ONDR	45	C	0940.4	0943.0	4.5	58.0	30.0		
	260	ONDR	45	C	0940.6	0942.7	3.2	76.0	74.0		
	430	KRAK	45	C	0940.6	0943.3	4.2	640.0	5.0		
	810	KRAK	7	C	0940.6	0943.4	4.1	43.0	3.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
26	610	SGMR	47	GB	0940.8	0942.3	2.2	70.0			QL=4 ST=2 TYP=5
	410	SGMR	47	GB	0940.8	0942.6	2.3	320.0			QL=4 ST=2 TYP=5
	6100	KISV	29	PBI	0942.0	0942.0		15.0			
	6100	KISV	2	S/F	0942.2	0942.6	1.0	12.0			
	260	ONDR	41	F	0943.2	0951.4	29.0	10.0			
	260	ONDR	40	F	1121.0	1152.0U	74.3	10.0			
	930	BORD	8	S	1224.9	1224.9	.1	52.0	1.0		
	2695	PENT	32	ABS	1325.0	1352.0	55.0	-6.6	-3.3		
	260	ONDR	40	F	1326.6	1403.0U	47.4	6.0			
	9400	HUAN	20	GRF	1358.0	1416.4	40.0	4.9	3.3		0
	9400	HUAN	20	GRF	1549.2	1555.2	13.4	3.3	2.3		0
	2800	OTTA	21	GRF	1909.0	1931.0	260.0	26.0	12.0		
	2800	OTTA	4	S/F	1909.5	1912.5	9.5	435.0	174.0		
	9400	HUAN	45	C	1909.6	1911.7	8.2	336.6	142.0		L
	4995	PALE	49	GB	1909.8	1912.1	19.3	620.0			QL=6 ST=2 TYP=6
	8800	PALE	49	GB	1909.8	1912.1	19.3	930.0			QL=6 ST=2 TYP=6
	4995	SGMR	49	GB	1909.8	1912.1	18.0	570.0			QL=6 ST=2 TYP=6
	8800	SGMR	49	GB	1909.8	1912.1	18.0	660.0			QL=6 ST=2 TYP=6
	2695	SGMR	47	GB	1909.8	1912.3	18.0	500.0			QL=6 ST=2 TYP=5
	2695	PALE	47	GB	1909.8	1912.3	19.3	470.0			QL=6 ST=2 TYP=5
	15400	PALE	49	GB	1910.1	1912.1	19.0	780.0			QL=6 ST=2 TYP=6
	15400	SGMR	49	GB	1910.1	1912.1	17.7	700.0			QL=6 ST=2 TYP=6
	1415	SGMR	47	GB	1910.3	1912.5	11.8	290.0			QL=6 ST=2 TYP=5
	1415	PALE	47	GB	1910.6	1912.3	8.5	270.0			QL=6 ST=2 TYP=5
	610	SGMR	47	GB	1911.3	1911.6	4.0	210.0			QL=6 ST=2 TYP=5
	610	PALE	47	GB	1911.5	1911.6	4.3	239.0			QL=6 ST=2 TYP=5
	245	SGMR	8	S	1914.1	1915.6	1.7	30.0			QL=6 ST=2 TYP=3
	410	SGMR	8	S	1914.5	1914.8	.3D	13.0			QL=6 ST=2 TYP=3
	245	PALE	47	GB	1915.3	1915.6	1.5	52.0			QL=6 ST=2 TYP=5
	9400	HUAN	29	PBI	1917.8	1917.8	65.3	44.3	14.7		L
	2800	OTTA	29	PBI	1919.0	1919.0	10.0	14.6			
	1000	TYKW	5	S	2317.8	2318.2	1.0	1.5	.5		
27	245	PALE	43	NS	1632.0	1751.6	736.0D	73.0			QL=6 ST=2 TYP=1
	245	LEAR	43	NS	2340.8	2345.3	16.2	30.0			QL=5 ST=2 TYP=1
	2000	TYKW	20	GRF	0128.0	0135.0	35.0	1.5	.7		
	3750	TYKW	5	S	0130.0	0146.0	25.0	2.0	1.0		
	3750	TYKW	21	GRF	0212.0	0231.0	170.0	5.0	2.0		
	2000	TYKW	21	GRF	0215.0	0245.0	180.0	3.0	1.5		
	2000	TYKW	20	GRF	0330.0	0410.0	80.0	2.0	1.0		
	3750	TYKW	20	GRF	0330.0	0415.0	90.0	5.0	2.5		
	9400	TYKW	20	GRF	0330.0	0420.0	120.0	6.0	3.0		
	3750	TYKW	5	S	0711.5	0711.7	1.5	3.0	1.0		
	6100	KISV	2	S/F	0711.5	0711.8	1.5	7.0			
	260	ONDR	45	C	0906.8	0909.6	11.0	17.0	4.0		
	245	LEAR	4	S/F	0908.0	0908.1	2.6	13.0			QL=6 ST=2 TYP=3
	260	ONDR	8	S	0956.9	0957.2	.3	3.0			
	2650	DWIN	1	S	1020.0	1020.0	1.0	10.0	5.0		
	6100	KISV	45	C	1020.5	1021.8	6.0	8.0			
	260	ONDR	8	S	1053.7	1053.7	.1	8.0			
	9400	HUAN	21	GRF	1535.4	1601.5	64.5	6.0	2.3		0
	9400	HUAN	1	S	1605.0	1606.5	4.6	7.6	4.0		L
	2800	OTTA	21	GRF	1720.0	1906.0	480.0D	21.0			
	2800	OTTA	21	GRF	1924.0	1937.0	50.0	16.2	8.1		
	2800	OTTA	1	S	1925.5	1927.5	4.5	6.4	3.2		
	245	SGMR	49	GB	2003.8	2004.0	2.5	880.0			QL=6 ST=2 TYP=6
	2800	OTTA	1	S	2039.0	2040.0	7.0	4.8	2.4		
	2800	OTTA	21	GRF	2039.0	2105.0	60.0	3.2	1.8		
	3750	TYKW	20	GRF	2250.0	2325.0	120.0	3.0	1.5		
28	245	LEAR	8	S	0310.8	0311.0	.3	13.0			QL=5 ST=2 TYP=3
	650	GORK	21	GRF	0349.5		25.5	6.5			
	2000	TYKW	20	GRF	0350.0	0400.5	40.0	5.0	1.5		
	3750	TYKW	20	GRF	0350.0	0401.0	35.0	4.0	1.5		
	1000	TYKW	5	S	0351.0	0359.6	12.0	12.0	4.0		
	500	HIRA	45	C	0351.0	0359.3	15.0	30.0	15.0		WR
	606	MANI	3	S	0353.0	0359.5	8.0	31.7	10.2		
	650	GORK	46	C	0353.4	0358.0	8.3	25.0			
	650	GORK			0353.4	0359.3		25.0			
	950	GORK	20	GRF	0353.5	0359.2	14.7	7.0			

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

JUNE 1982

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
28	610	LEAR	20	GRF	0353.6	0358.0	10.7	43.0			QL=6 ST=2 TYP=2
	200	HIRA	27	RF	0353.6	0359.3	15.0	6.0	2.0		
	410	LEAR	4	S/F	0354.8	0359.5	6.8	19.0			QL=6 ST=2 TYP=3
	1415	MANI	3	S	0356.5	0359.5	4.5	10.4	3.5		
	610	PALE	4	S/F	0356.6	0358.0	4.2	26.0			QL=6 ST=2 TYP=3
	245	LEAR	4	S/F	0357.1	0359.5	4.2	9.0			QL=6 ST=2 TYP=3
	1415	LEAR	4	S/F	0357.3	0359.6	5.8	21.0			QL=6 ST=2 TYP=3
	1415	PALE	4	S/F	0358.6	0359.6	2.4	22.0			QL=6 ST=2 TYP=3
	1000	TYKW	29	PBI	0403.0		15.0	3.0	1.0		
	204	IZMI	5	S	1119.2	1119.5	.8	136.0	59.0		
	260	ONDR	41	F	1219.0	1234.0	93.5	20.0			
	9400	HUAN	22	GRF	1305.0	1340.2	118.8	12.2	6.6		0
	2800	OTTA	20	GRF	1305.0	1420.0	235.0	5.4	2.7		
	15400	PALE	4	S/F	2133.8	2134.3	2.5	39.0			QL=6 ST=2 TYP=3
	3750	TYKW	20	GRF	2320.0	2352.0	110.0	4.0	2.0		
	2695	PENT	20	GRF	2325.0	0000.0	120.0	4.2	2.2		
	2000	TYKW	20	GRF	2330.0	2400.0	95.0	2.0	1.0		
	1000	TYKW	20	GRF	2340.0	0010.0	80.0	1.5	.7		
29	245	LEAR	8	S	0145.1	0145.5	1.2	18.0			QL=6 ST=2 TYP=3
	204	IZMI	5	S	0915.0	0915.1	.2	136.0	45.0		
	260	ONDR	40	F	0945.8	0946.9	1.6	5.0			
	430	KRAK	8	S	0954.7	0954.7	.2	120.0			
	260	ONDR	40	F	1143.7	1144.8	22.0	4.0			
	29	UPIC	46	C	1249.5	1250.0	13.0				
	33	UPIC	46	C	1249.6	1250.0	12.6				
	9400	HUAN	1	S	1622.0	1625.0	4.8	5.4	2.5		0
	9400	HUAN	20	GRF	1810.4	1828.8	46.2	4.5	1.2		0
	9400	HUAN	20	GRF	2052.9	2119.0U	45.2	9.1	3.8		0
	100	HIRA			2214.8	2215.7		75.0			WL
	100	HIRA	42	SER	2214.8	2217.2	3.1	950.0			WL
	245	LEAR	8	S	2359.3	2359.6	1.0	30.0			QL=6 ST=2 TYP=3
30	2000	TYKW	45	C	0645.0	0658.2	17.0	6.0	2.0		
	2000	TYKW	29	PBI	0702.0		20.0	2.0	1.0		
	260	ONDR	42	SER	0713.6	0718.3	10.0				
	204	IZMI	5	S	0917.8	0917.9	.2	190.0	60.0		
	9400	HUAN	20	GRF	1357.4	1428.0	58.3	5.3	2.0		0
	930	BORD	41	F	1419.5	1419.7	.4	24.0	2.0		
	9400	HUAN	20	GRF	1542.4	1548.5	13.1	3.5	1.5		0

Reports are received routinely from the following observatories:

ATHN = Athens	HUAN = Huancayo	NOBE = Nobeyama	SYDN = Sydney
BERN = Berne	IRKU = Irkutsk	ONDR = Ondrejov	TORN = Torun
BORD = Bordeaux	IZMI = IZMIRAN	OTTA = Ottawa	TYKW = Toyokawa
CRIM = Crimea	KISV = Kislovodsk	PALE = Palehua	YUNN = Yunnan
DWIN = Dwingeloo	KRAK = Krakow	PEKG = Peking	TRST = Triste
GORK = Gorky	LEAR = Learmonth	POTS = Potsdam	UPIC = Upice
HARS = Harestua	MANI = Manila	SAOP = Sao Paulo	VORO = Voroshilov
HIRA = Hiraiso	NAGO = Nagoya	SGMR = Sagmore Hill	

Explanation of Type Code:

1 Simple 1	7 Minor +	24 Rise	30 Post Burst Increase A	43 Onset of Noise Storm
2 Simple 1F	8 Spike	25 Rise A	31 Post Burst Decrease	44 Noise Storm in Progress
3 Simple 2	20 Simple 3	26 Fall	33 Absorption	45 Complex
4 Simple 2F	21 Simple 3A	27 Rise and Fall	40 Fluctuation	46 Complex F
5 Simple	22 Simple 3F	28 Precursor	41 Group of Bursts	47 Great Burst
6 Minor	23 Simple 3AF	29 Post Burst Increase	42 Series of Bursts	48 Major
				49 Major +

1A Simple 1A	4A Simple 2AF	24PF Post Rise F	27F Rise and Fall F
3A Simple 2A	240 Rise only	16A Fall A	27AF Rise and Fall AF
21A Simple 3A GRF	240F Rise only F	260 Fall Only	31A Post Burst Decrease A
2A Simple 1AF	24P Post Rise	26F Fall F	32A Absorption A
			46F Complex F

Under the "Remarks" column heading, RIF stands for Relative Increase in Flux. The expression "RIF 469.2", for example, denotes a flux increase of 469.2% above background.

MASS EJECTIONS FROM THE SUN

May 1982

Sta	Day	Observed UT Start	Max	End	Location RA°	R/R_o	Freq or Wavelength	Kind of Event
CULG	Jun 01	0700		0710			Meter	II Herringbone
KHAR	Jun 01	0725		0800	078	0.93	H-alpha	S
KHAR	Jun 01	0733		0755	241	1.0	H-alpha	S
KHAR	Jun 01	0806		0835	112	0.44	H-alpha	S
KHAR	Jun 01	0948		1004	081	0.97	H-alpha	S
KHAR	Jun 02	0849		0905	057	0.58	H-alpha	S
WEND	Jun 02	0916	0920	0924	099	1.0	H-alpha	S
KHAR	Jun 02	0934		0950	057	0.58	H-alpha	S
KHAR	Jun 02	0947		1003	053	0.56	H-alpha	S
HARV	Jun 02	1305		1307			Decl; meter; deka	II Large Group
HARV	Jun 02	1518		1533			Meter	II
WEIS	Jun 02	1519		1533			60-160 MHz	II
HARV	Jun 02	1534		1548			Meter; dekameter	II
WEIS	Jun 02	1534.5		1553			30-160 MHz	II
HARV	Jun 02	1547		1601			Meter; dekameter	II
WEIS	Jun 02	1547.2		1602.5			35-160 MHz	II
WEND	Jun 02	1554	1602	1620	099	0.99-1.03	H-alpha	S
HARV	Jun 02	1917		1923			Meter; dekameter	II
CULG	Jun 03	0233.5		0302			Meter	II
CULG	Jun 03	0257		0325			Meter	IV
CULG	Jun 03	0402		0450			Meter	II
WEIS	Jun 03	0410.0		0448.5			30-180 MHz	II
CULG	Jun 03	0426		0452			Meter	IV Structure
WEIS	Jun 03	0836.8		0848.3			40-300 MHz	II Harmonic
SGMR	Jun 03	1142.6		1228.0			Meter	IV
WEIS	Jun 03	1142.9		1148.5			500-1000 MHz	IV
WEIS	Jun 03	1144.0		1210.5			30-350 MHz	II Harmonic
WEIS	Jun 03	1147.5		1203.5			30-110 MHz	IVm
SGMR	Jun 03	1202.1		1213.0			Meter	II
WEIS	Jun 03	1203.5		1207.5			240-800 MHz	IV
HARV	Jun 03	1250		1316			Decimeter	IV
HARV	Jun 03	1316		1452			Decimeter	IV
HARV	Jun 03	1506		1518			Decimeter	IV
CULG	Jun 04	0633		0635			Decimeter; meter	II
KHAR	Jun 04	1010		1037	357	0.33	H-alpha	S
KHAR	Jun 04	1010		1050	099	0.85	H-alpha	S
WEIS	Jun 04	1335.2		1358.5			200-1000 MHz	IV
HARV	Jun 04	1337		1359			Decimeter	IV
KHAR	Jun 05	0736	0736	0815	094	0.85-0.81	H-alpha	SP
KHAR	Jun 05	0819		0844	097	0.66	H-alpha	S
KHAR	Jun 05	0840		0956	093	0.75	H-alpha	S
KHAR	Jun 05	1003		1137	093	0.75	H-alpha	S
KHAR	Jun 05	1033	1033	1124	093	0.70	H-alpha	SP
SGMR	Jun 05	1730.2		1743.8			Meter	II
WEND	Jun 06	1354		1426	258	1.0	H-alpha	S
HARV	Jun 06	1634		1716			Decl; meter; deka	II
HARV	Jun 06	1635		1754			Decimeter; meter	IV
SGMR	Jun 06	1640.3		1652.2			Meter	II
SGMR	Jun 06	1652.2		1820.0			Meter	IV
HARV	Jun 06	1755		1916			Decimeter; meter	IV
HARV	Jun 06	1917		2109			Decimeter	IV
HARV	Jun 06	2126		2158			Decimeter	IV
KHAR	Jun 09	0712		0718	112	0.66	H-alpha	S
HARV	Jun 09	1233		1237			Decimeter; meter	II
WEIS	Jun 09	1251.3		1252.5			35-70 MHz	II Harmonic
HARV	Jun 10	1737		1803			Decimeter	IV Intermittent
HARV	Jun 10	1940		2245			Meter	IV
CULG	Jun 10	2242.5		2243			Meter	Possible II

MASS EJECTIONS FROM THE SUN

May 1982

Sta	Day	Observed UT Start	Max	End	Location RA°	R/R_o	Freq or Wavelength	Kind of Event
ABST	Jun 12	0436	0558	0638	080	1.00	H-alpha	SP
KHAR	Jun 12	0700		1150	083	1.0-1.05	H-alpha	SP
KHAR	Jun 13	0937		1047	062	1.00	H-alpha	S
KHAR	Jun 13	0957		1006	078	1.00	H-alpha	S
KHAR	Jun 13	1132		1145	073	0.73	H-alpha	S
HARV	Jun 13	1817		1822			Decimeter; meter	II
HARV	Jun 13	1817		1822			Decimeter	IV
CULG	Jun 14	0615		0616			Meter	II Small Group
ABST	Jun 15	0413	0425	0706	297	1.00	H-alpha	Q
ABST	Jun 15	0413	0425	0706	257	1.00	H-alpha	Q
WEIS	Jun 15	0825.3		0828.5			Meter	II
LEAR	Jun 15	0825.4		0828.9			Meter	II
GEOR	Jun 15	0839E		0849	251	1.0	H-alpha	S
SGMR	Jun 15	1510.0		1530.1			Meter	IV
HARV	Jun 15	1512		1530			Dec1; meter; deka	II
WEIS	Jun 15	1514.4		1529.3			30-140 MHz	II Harmonic
SGMR	Jun 15	1519.7		1526.4			Meter	II
WEIS	Jun 15	1529.2		1543.3			30-80 MHz	II Harmonic
HARV	Jun 16	2039		2103			Meter; dekameter	II
SGMR	Jun 16	2042.5		2102.8			Meter	II
PALE	Jun 16	2042.7		2100.7			Meter	II
KHAR	Jun 17	0653		0718	112	0.75	H-alpha	S
KHAR	Jun 17	0820		0847	112	0.75	H-alpha	S
KHAR	Jun 17	0913		0938	112	0.75	H-alpha	S
KHAR	Jun 17	0944		1010	068	0.80	H-alpha	S
KHAR	Jun 17	0946		1000	112	0.75	H-alpha	S
KHAR	Jun 18	0730		0734	070	0.60	H-alpha	S
KHAR	Jun 18	0733		0734	245	0.97	H-alpha	S
HARV	Jun 18	2146		2158			Meter	II
CULG	Jun 18	2146.5		2202.5			Meter	II
HARV	Jun 19	1958		2024			Meter; dekameter	II
PALE	Jun 19	1958.5		2004.0			Meter	II
SGMR	Jun 19	1959.1		2008.3			Meter	II
SGMR	Jun 19	2003.9		2009.0			Meter	IV
PALE	Jun 19	2004.1		2023.3			Meter	IV
GEOR	Jun 22	0840E		0857D	265	1.0	H-alpha	CB
GEOR	Jun 22	0854E		0859U	277	1.0	H-alpha	S
CULG	Jun 22	2123		2124.5			Meter	Possible II
GEOR	Jun 24	0840E		0854D	245	1.0	H-alpha	CB
CULG	Jun 23	0116		0119			Meter	Possible II Weak
CULG	Jun 23	0545.5		0547.5			Meter	II Weak
KHAR	Jun 23	0652		0702	295	0.62	H-alpha	S
KHAR	Jun 23	0703		0718	278	1.00	H-alpha	S
CULG	Jun 23	2134		2143			Meter	II
LEAR	Jun 24	0522.7		0532.0			Meter	IV
HARV	Jun 24	1943		2004			Decimeter; meter	IV
HARV	Jun 25	2135		2139			Decimeter; meter	IV
KHAR	Jun 27	0749		0812	282	1.00	H-alpha	S
KHAR	Jun 27	0828		0834	282	1.00	H-alpha	S
KHAR	Jun 27	0847		0853	282	1.00	H-alpha	S
KHAR	Jun 27	1018	1023	1103	286	1.00-1.05	H-alpha	S
KHAR	Jun 30	0736		0718	1.08	1.00	H-alpha	S
KHAR	Jun 30	0736		0818	278	1.00	H-alpha	S

SGD 460 Part II (Comprehensive)

JULY 1980 DATA

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H - ALPHA S O L A R F L A R E S

JULY 1980

Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs Type	Area Measurement Time (UT)	Area Measurement Appar (Disk)	Area Measurement Corr (Sq Deg)	Remarks
812 VORO	01	0054	0056	0101	S11	W55	.833	16927	26.9	7	-N	C	0056	63	1.1	DJ
813 VORO	01	0112	0115	0130	N10	E29	.495	16946	3.2	18	-N	C	0115	143	1.7	DHJ
	01	0243	0353	NO FLARE PATROL												
814 ABST	01	0849	0850	0919	S38	E85	.999		7.7	30	?F	C	0850	87		ADV
			IMP.1 NO : YUNN HTPR CATA													
815 HTPR	01	1025	1032	1100	S12	W35	.613	16943	28.8	35	-F	C	1032	40	.5	E
816 HTPR	01	1130	1137	1155	S12	W35	.613	16943	28.9	25	-F	C	1137	40	.5	E
817 HTPR	01	1518	1523	1535	S17	E57	.863	16957	5.9	17	-F	C	1523	30	.6	
GRP85818	01	1622+4	1628+1	1723	S12	W38	.651	16943	28.8	61	1B			230	3.0	E
HOLL	01	1622	1629	1711	S12	W38	.651	16943	28.8	49	1B	3 C		359		
BIGB	01	1626	1628U	1735	S12	W37	.638	16943	28.9	69	1B	1 P	1628	220	2.8	
HUAN	01	1626		1658D	S12	W38	.651	16943	28.8	32D	-N	2 P	1631	65	.9	
HTPR	01	1628E		1631D	S12	W38	.651	16943	28.8	3D	1B	C	1630	240	3.1	E
	01	1638	1642	NO FLARE PATROL												
819 HOLL	01	1733	1734	1744	S15	W69	.943	16927	26.6	11	-N	3 C		19		
	01	2122	2125	NO FLARE PATROL												
820 HOLL	02	0018	0034	0052	S12	W41	.687	16943	28.9	34	-N	3 C		38		
821 HOLL	02	0137	0140	0148D	S13	W41	.691	16943	29.0	11D	-F	3 C		24		
822 ABST	02	0723	0725	0730	S07	W46	.731	16943	28.9	7	-F	C	0725	105	1.6	D
823 ABST	02	0725E	0736	0747D	S17	W64	.915	16928	27.5	22D	?F	P	0736	87		DJ
			IMP.1 NO : YUNN CATA													
824 RAMY	02	1143	1143	1152	S24	W65	.931	16928	27.6	9	-F	3 C		22		
825 HTPR	02	1319	1322	1330	N28	E14	.475	16955	3.6	11	-F	C	1322	10	.1	
826 HTPR	02	1528	1530	1535	S10	W50	.782	16943	28.9	7	-F	C	1530	20	.3	
GRP85827	02	1941+0	1942+0	1956	N30	E10	.479	16955	3.6	15	-F			30	.3	
HOLL	02	1941	1942	2003D	N30	E10	.479	16955	3.6	22D	-F	3 C		38		
RAMY	02	1941	1942	1949	N30	E11	.484	16955	3.6	8	-F	3 C		23		
	02	2104	2142	NO FLARE PATROL												
828 CULG	02	2259	2302U	2325U	S18	W27	.557	16939	30.9	26D	-N	C	2302	140	1.7	T
829 CULG	02	2330	2333	2352U	S10	W54	.822	16943	28.9	22D	-N	C	2333	100	1.7	FT
830 CULG	02	2357	2358	0003U	S18	W27	.557	16939	1.0	6D	-N	C	2358	160	1.9	T
831 CULG	02	2358	2404	0008	S09	W54	.820	16943	28.9	10	-F	C	2404	70	1.2	T
GRP85832	03	0021+1	0023+3	0043	S11	W53	.815	16943	29.0	22	1B			230	4.0	D
CULG	03	0021	0026	0049	S10	W54	.823	16943	29.0	28	1B	C	0026	260	4.4	T
HOLL	03	0022	0023	0036	S12	W52	.807	16943	29.1	14	1B	3 C		200		D
833 CULG	03	0055	0059	0106	S09	W54	.821	16943	29.0	11	-N	C	0059	100	1.7	T
GRP85834	03	0122+7	0128 0136+1	0149	S10	W53	.813	16943	29.1	27	1B			180	3.1	K
CULG	03	0122	0136U	0154	S09	W55	.830	16943	28.9	32	1B	C	0136	240	4.1	K
HOLL	03	0125	0137	0137D	S11	W53	.815	16943	29.1	12D	1B	3 C		192		D
MITK	03	0125	0136	0143	S11	W53	.815	16943	29.1	18	-B	C	0136			E
MANI	03	0126E	0128U	0140D	S10	W54	.823	16943	29.0	14D	1B	1 V		185	3.2	
BIGB	03	0129	0136	0143D	S10	W53	.813	16943	29.1	14D	1N	2 P	0136	120	2.1	
835 CULG	03	0255E	0257	0303D	S20	W90	1.000	16928	26.4	8D	?F	P	0257	90		
			IMP.1 NO : MITK PALE													

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs	Type	Area Measurement Time (UT)	Area Measurement Appar (Disk)	Area Measurement Corr (Sq Deg)	Remarks
836 TACH	03	0420E		0446D	S10	W55	.832	16943	29.1	26D	?F		V	0420	177	3.3	E
			IMP.1 NO : YUNN														
837 ABST	03	0530	0532	0539D	S07	W59	.864	16943	28.8	9D	-F		P	0532	87	1.6	DJ
838 ABST	03	0712	0719	0729	S19	W27	.567	16939	1.3	17	-F		C	0719	87	1.1	DJ
839 ABST	03	0826	0830	0839	S06	W62	.888	16943	28.7	13	-F		C	0830	87		D
840 ABST	03	0907E	0909	0914	S09	W58	.858	16943	29.0	7D	-F		P	0909	52	1.0	D
841 HTPR	03	1350	1355	1359	S18	W30	.592	16939	1.3	9	-F		C	1355	20	.2	E
GRP85842	03	1512+2	1514+0	1520	S11	W60	.877	16943	29.1	8	-N				35	.7	
HTPR	03	1512	1514	1520	S10	W60	.876	16943	29.1	8	-N		C	1514	30	.6	
RAMY	03	1514	1514	1520	S12	W61	.887	16943	29.1	6	-N	3	C		43		
GRP85843	03	2135+0	2145+1	2227	S15	E27	.534	16957	5.9	52	-F				70	.8	
RAMY	03	2135	2146	2147D	S14	E27	.526	16957	5.9	12D	-F	3	C		74		
BIGB	03	2135	2145	2227	S17	E28	.561	16957	6.0	52	-F	2	C	2145	80	.9	
	04	0121	0227	NO FLARE PATROL													
	04	0251	0353	NO FLARE PATROL													
	04	0357	0358	NO FLARE PATROL													
	04	0400	0411	NO FLARE PATROL													
GRP85844	04	0502>9	0520 0547+0	0639	S17	W40	.699	16939	1.2	97	-F				140	2.0	EJ
ABST	04	0502E	0534	0655D	S18	W41	.715	16939	1.1	113D	-F		P	0534	87	1.3	DJ
CULG	04	0517	0520	0530U	S18	W42	.725	16939	1.1	13D	-F		C	0520	140	2.0	
HTPR	04	0543	0547	0600	S17	W39	.688	16939	1.3	17	-F		C	0547	100	1.3	E
ABST	04	0545	0547	0639	S16	W40	.694	16939	1.2	54	1F		C	0547	175	2.5	EJ
845 ABST	04	0509	0512	0521	S11	W69	.940	16943	29.0	12	-F		C	0512	87		DJ
GRP85846	04	0635+2	0637+0 0659+1	0724	N28	W08	.438	16955	3.7	49	-N						J
ABST	04	0635	0637	0655D	N29	W07	.449	16955	3.7	20D	-N		P	0637	105	1.2	DJ
HTPR	04	0636	0637	0724	N30	W09	.472	16955	3.6	48	-N		C	0637	30	.3	
KANZ	04	0637	0659	0706D	N28	W08	.438	16955	3.7	29D	-N	2					
CATA	04	0700	0700	0710	N28	W08	.438	16955	3.7	10	-F	2	C	0700	56	.6	
ABST	04	0721E	0722	0803	N29	W07	.449	16955	3.8	42D	-N		P	0722	105	1.2	DJ
847 ABST	04	0752	0754	0755	N30	W07	.464	16955	3.8	3	-F		C	0754	87	1.0	DJ
GRP85848	04	0950+7	1001+1	1013	N29	W09	.457	16955	3.7	23	-N						DJ
HTPR	04	0950	1001	1013	N30	W11	.481	16955	3.6	23	-N		C	1001	30	.3	
ABST	04	0957	1002	1008D	N29	W08	.453	16955	3.8	11D	-N		P	1002	105	1.2	DJ
849 RAMY	04	1201	1201	1206	S14	W70	.948	16943	29.3	5	-N	3	C		19		
850 HTPR	04	1400E		1415	N30	W12	.487	16955	3.7	15D	-F		C	1402	20	.2	
	04	2045	2102	NO FLARE PATROL													
	04	2124	2144	NO FLARE PATROL													
851 CULG	04	2203	2206	2217	S16	W46	.759	16939	1.5	14	-F		C	2206	70	1.1	
852 CULG	04	2332	2336	2359	S13	W80	.988	16943	29.0	27	-F		C	2336	40		
853 CULG	05	0013	0021	0115	N30	W15	.504	16955	3.9	62	?N		C	0021	400	4.6	U
			IMP.1 NO : BIGB PALE														
854 BIGB	05	0021	0025	0043	N18	E90	1.000	16965	11.8	22	?N	3	C	0025	60		
			IMP.1 NO : CULG PALE														
855 MANI	05	0024E	0024U	0027D	N28	W70	.945	16937	29.8	3D	-B	1	V		65	1.4	F
856 CULG	05	0049	0054	0102	S16	W48	.780	16939	1.4	13	-F		C	0054	70	1.1	

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs Type		Area Measurement Time (UT)	Appar (Disk)	Corr (Sq Deg)	Remarks
857 CULG	05	0149	0209	0300U	N28	W18	.501	16955	3.7	71D	?N		C	0209	280	3.2	ZF
			IMP.1 NO : PALE														
858 MANI	05	0159E	0204U	0210D	N28	W70	.945	16937	29.8	11D	-F	1	V		40	.9	F
859 CULG	05	0231	0237U	0300U	N18	E90	1.000	16965	11.9	29D	?F		C	0237	60		
			IMP.1 NO : PALE														
860 CULG	05	0312	0338	0353U	N17	W24	.458	16946	3.3	41D	-N		C	0338	110	1.2	
GRP85861	05	0731+4	0738+4	0823	N27	W23	.535	16955	3.6	52	1N				230	2.7	FJ
ABST	05	0731	0738	0840	N29	W21	.538	16955	3.7	69	1B		C	0738	218	2.6	FJ
CATA	05	0735	0740	0820	N27	W22	.526	16955	3.7	45	1F	2	C	0740	281	3.4	
ABST	05	0735	0741	0803	N27	W26	.564	16955	3.4	28	-N		C	0741	148	1.8	FJ
ATHN	05	0739E	0742U	0823	N25	W25	.536	16955	3.4	44D	-B	3	C		175		
ATHN	05	0739E	0742	0823	N25	W25	.536	16955	3.4	44D	-B	3	V	0742	175	2.1	
GRP85862	05	1110	1114+6	1135	N27	W23	.535	16955	3.7	25	-F				90	1.1	E
CATA	05	1110	1120	1135	N27	W23	.535	16955	3.7	25	-F	2	C	1120	112	1.4	
WEND	05	1111E	1114	1131D	N27	W23	.535	16955	3.7	20D	-N		C	1114	81	1.2	E
	05	1153	1234	NO FLARE PATROL													
863 RAMY	05	1324	1327	1335	N25	W28	.568	16955	3.5	11	-F	3	C		31		
GRP85864	05	1441	1452+2	1514	S06	W24	.434	16956	3.8	33	-F				35	.4	
HOLL	05	1441	1454	1504	S06	W24	.434	16956	3.8	23	-F	*	C		39		
KANZ	05	1448E	1452	1514	S05	W24	.428	16956	3.8	26D	-N	*					
RAMY	05	1454	1454	1515	S06	W24	.434	16956	3.8	21	-F	*	C		31		
865 HOLL	05	1442	1455	1459	N27	W28	.584	16955	3.5	17	-N	3	C		50		
GRP85866	05	1521+2	1601	1650	N27	W25	.555	16955	3.8	89	-B				70	.8	D
			1608+1														
KANZ	05	1521		1548D	N27	W25	.555	16955	3.8	27D	-N	1					
HOLL	05	1523	1601	1717	N27	W25	.555	16955	3.8	114	1B	3	C		215		D
RAMY	05	1550	1608	1645	N27	W25	.555	16955	3.8	55	-B	3	C		98		
BIGB	05	1602	1609	1650	N29	W25	.574	16955	3.8	48	-B	3	C	1609	50	.6	
867 RAMY	05	1632	1632	1640	N20	E75	.965	16965	11.3	8	-F	3	C		12		
868 RAMY	05	1701	1702	1713	N26	W28	.576	16955	3.6	12	-F	3	C		23		
GRP85869	05	2237E	2240	2359D	N28	W28	.593	16955	3.8	82	1B						
			2247														
BIGB	05	2237E	2240U	2359D	N29	W28	.602	16955	3.8	82D	1B	3	P	2240	200	2.3	
HOLL	05	2240E	2247	2249D	N28	W29	.603	16955	3.8	9D	1B	3	C		252		
	06	0021	0030	NO FLARE PATROL													
870 HOLL	06	0044E	0044U	0058D	N28	W30	.612	16955	3.8	14D	-N	2	C		40		
	06	0058	0132	NO FLARE PATROL													
	06	0156	0208	NO FLARE PATROL													
	06	0215	0227	NO FLARE PATROL													
871 PURP	06	0250	0252	0254	N29	W29	.610	16955	3.9	4	?F		C				
			IMP.1 NO : PALE														
872 TACH	06	0421E	0422	0431	N29	W31	.629	16955	3.9	10D	?F		V	0422	530	6.9	F
			IMP.2 NO : PALE														
GRP85873	06	0440	0441	0458	N29	W30	.620	16955	3.9	18	?N						U
			0450														
TACH	06	0440	0441	0458	N31	W28	.618	16955	4.1	18	?F		V	0441	620	8.0	U
			IMP.2 IMP.S														
MANI	06	0447E	0450U	0455D	N27	W33	.635	16955	3.7	8D	-B	1	V		50	.7	
GRP85874	06	0645+5	0655	0710D	N27	W33	.635	16955	3.8	25	-N						
KANZ	06	0645	0717	0747	N27	W33	.635	16955	3.8	62	-B	2					
CATA	06	0650	0655	0710	N28	W33	.642	16955	3.8	20	1F	2	C	0655	169	2.3	

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	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs Type	Area Time (UT)	Measurement Appar (Disk)	Corr (Sq Deg)	Remarks
875	KANZ	06	0811		0832D	N27	W34	.645	16955	3.8	21D	-N	1				
876	KHAR	06	0936E		0936D	N18	E71	.945	16965	11.7		-F	P	0936	30		D
877	KHAR	06	1002E	1002	1015D	N26	W42	.721	16955	3.3	13D	-F	P	1009	45	.6	E
878	KHAR	06	1058E	1058	1124D	N16	E74	.960	16965	12.0	26D	?F	P	1114	140		EHO
				IMP.1 NO : CATA RAMY													
GRP85879		06	1109E	1110	1139D	N27	W39	.696	16955	3.5	30	1F					EH
	KHAR	06	1109E	1110	1138D	N28	W40	.711	16955	3.5	29D	1F	P	1114	160	2.1	EH
	KANZ	06	1116E		1139D	N27	W39	.696	16955	3.5	23D	-F	1				
GRP85880		06	1148>9	1224+1	1413	N26	W36	.659	16955	3.8	145	-B					D
	RAMY	06	1148	1225	1413	N25	W39	.685	16955	3.6	145	-B	3 C		141		D
	KANZ	06	1219	1224	1232D	N27	W34	.645	16955	4.0	13D	-B	1				
881	RAMY	06	1511	1511	1527	N26	W41	.711	16955	3.6	16	-F	3 C		27		
		06	1940	2003	NO FLARE PATROL												
		06	2015	2057	NO FLARE PATROL												
882	YUNN	07	0115E	0116	0119	S05	W44	.704	16956	3.8	4D	-N	P		96	1.4	
		07	0152	0155	NO FLARE PATROL												
		07	0253	0300	NO FLARE PATROL												
883	CULG	07	0426	0435	0444	N32	W51	.825	16955	3.4	18	-F	C	0435	40	.8	
884	ABST	07	0504	0528	0532	N30	W47	.785	16955	3.7	28	?F	P	0528	262	4.4	FJK
				IMP.1 NO : TACH													
885	CULG	07	0610	0621U	0621D	N29	W48	.790	16955	3.7	11D	-N	P	0621	60	.9	T
886	ABST	07	0828E	0833	0841D	N29	W50	.807	16955	3.6	13D	?F	P	0833	227	3.9	FJ
				IMP.1 NO : YUNN PURP													
GRP85887		07	1005>9	1015+3	1023D	N29	W50	.807	16955	3.7	18	1N			260	4.5	HJ
	CATA	07	1005	1015	1055D	N28	W50	.804	16955	3.7	50D	1F	* P	1015	281	4.9	
	YUNN	07	1016	1018	1023	N30	W50	.810	16955	3.7	7	1B	* C		241	4.2	HJ
GRP85888		07	1010	1018+2	1033	N21	E44	.722	16964	10.7	23	1N			150	2.2	E
	CATA	07	1010	1020	1055D	N21	E44	.722	16964	10.7	45D	-F	? P	1020	112	1.7	
	YUNN	07	1016E	1018	1030	N20	E44	.718	16964	10.7	14D	1B	P		193	2.9	
	KHAR	07	1024E	1024	1033D	N22	E43	.714	16964	10.7	9D	-N	P	1024	140	2.0	E
889	KHAR	07	1024E	1024	1028D	N24	E56	.845	16963	11.6	4D	-F	P	1024	80	1.8	E
890	RAMY	07	1129	1151	1207	N26	W49	.788	16955	3.8	38	-B	3 C		45		D
891	RAMY	07	1213	1214	1234	N26	W50	.797	16955	3.8	21	-N	3 C		57		
GRP85892		07	1247+4	1327+2 1404	1435	N26	W55	.841	16955	3.4	108	-N					H
	KANZ	07	1247	1327	1349	N27	W52	.818	16955	3.6	62	-N	2				H
	RAMY	07	1251	1329	1444	N25	W56	.847	16955	3.3	113	-N	3 C		65		
	KANZ	07	1352	1404	1425	N26	W56	.849	16955	3.4	33	-N	2				
893	KANZ	07	1259	1302	1314	N14	E60	.867	16965	12.0	15	-F	2				
894	KANZ	07	1446	1454	1510	S23	W73	.970		2.1	24	-F	1				G
GRP85895		07	1450+3	1529+1	1630	N25	W52	.813	16955	3.7	100	-B			50	.9	DL
	KANZ	07	1450	1530	1630D	N27	W52	.818	16955	3.7	100D	-N	2				L
	RAMY	07	1452	1529	1626	N25	W55	.839	16955	3.5	94	-B	3 C		39		D
	HOLL	07	1453	1530	1641	N25	W51	.804	16955	3.8	108	-B	2 C		73		
		07	1821	1840	NO FLARE PATROL												
		07	2051	2159	NO FLARE PATROL												
		07	2212	2220	NO FLARE PATROL												

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs Type	Area Time (UT)	Measurement Appar (Disk)	Corr (Sq Deg)	Remarks
896 CULG	07	2330	2334	2349	S29	W73	.974	16949	2.5	19	-F	C	2334	60		
	07	2358	0000	NO FLARE PATROL												
GRP85897	08	0050+1	0051+2	0059	N26	W65	.914	16955	3.2	9	-N			50		
CULG	08	0050U	0051	0100	N26	W66	.920	16955	3.1	10D	-N	P	0051	60	1.4	T
BIGB	08	0051	0053	0058	N26	W64	.907	16955	3.2	7	-N	3 C	0053	40	.9	
	08	0140	0146	NO FLARE PATROL												
	08	0152	0204	NO FLARE PATROL												
	08	0207	0211	NO FLARE PATROL												
898 MANI	08	0225E	0227U	0230D	N23	E34	.618	16964	10.7	5D	-F	1 V		50	.6	
	08	0230	0243	NO FLARE PATROL												
899 CULG	08	0518	0519	0523	S05	W63	.895	16956	3.5	5	-F	C	0519	30	.7	
900 ABST	08	0539E	0539	0647D	N30	W61	.893	16955	3.7	68D	1F	P	0539	218		EJK
GRP85901	08	0702+8	0706+4	0712	S05	W64	.903	16956	3.5	10	-F			35	.8	
ISTA	08	0702		0711	S05	W65	.910	16956	3.4	9	-F					E
BUCA	08	0705	0706	0712D	S04	W63	.894	16956	3.6	7D	-N	C	0706	43	.9	D
CATA	08	0710	0710	0720	S08	W64	.897	16956	3.5	10	-F	2 C	0710	28	.7	
902 CATA	08	0720	0725	0730	N23	W59	.867	16955	3.9	10	-F	2 C	0725	84	1.7	H
903 CATA	08	0800	0810	0835	N21	E31	.571	16964	10.7	35	-F	1 C	0810	84	1.0	
904 KHAR	08	0830E	0830	0911D	N27	W65	.915	16955	3.5	41D	-F	P	0839	60		E
GRP85905	08	0928E	0938	0959D	N24	E45	.742	16963	11.8	31	1F					E
KHAR	08	0928E	0938	0959D	N25	E45	.746	16963	11.8	31D	2F	P	0928	420	6.1	E
CATA	08	0930E	0945	0945D	N23	E45	.739	16963	11.8	15D	1F	1 P	0945	309	4.7	
906 KHAR	08	0953E	0955	0959D	N27	W65	.915	16955	3.5	6D	-F	P	0954	80		E
GRP85907	08	1135+4	1140+2 1153	1156	N23	W70	.941	16955	3.2	21	1N					H
CATA	08	1135	1140	1145D	N23	W70	.941	16955	3.2	10D	1F	2 P	1140	84		
KHAR	08	1135E	1153	1205D	N24	W72	.952	16955	3.1	30D	1N	P	1153			H
RAMY	08	1139	1142	1147	N23	W68	.930	16955	3.4	8	-N	3 C		34		
908 KHAR	08	1202E	1211	1221D	N23	W90	1.000	16945	1.8	19D	-N	P	1206	80		HQ
909 KHAR	08	1213E	1215	1224D	N20	E47	.750	16963	12.0	11D	-F	V	1215			E
910 BIGB	08	1503	1508	1519	N18	E90	1.000	16974	15.4	16	?B	3 C	1508	50		
			IMP.1 NO : RAMY HOLL													
911 HOLL	08	1545	1547	1607	N21	E26	.510	16964	10.6	22	-F	3 C		50		
GRP85912	08	1859+2	1904+1	1913	N20	E87	.998	16974	15.3	14	-B					
BIGB	08	1859	1905	1911	N19	E90	1.000	16974	15.5	12	1B	3 C	1905	80		
HOLL	08	1901	1904	1915	N22	E85	.995	16974	15.2	14	-B	3 C				
913 CULG	08	2254	2307	2316	S13	W35	.623	16958	6.3	22	-F	C	2307	30	.4	
GRP85914	08	2314+1	2317+1	2329	N15	E90	1.000	16974	15.7	15	-N			30		
CULG	08	2314	2317	2319D	N15	E90	1.000	16974	15.7	5D	-N	P	2317	20		
BIGB	08	2315	2318	2329	N16	E90	1.000	16974	15.7	14	-B	3 C	2318	40		
915 CULG	08	2330	2333	2338	N28	W73	.958	16955	3.5	8	?N	C	2333	90		FK
			IMP.1 NO : BIGB													
916 CULG	09	0000	0005	0010	N30	W70	.945	16955	3.8	10	-F	C	0005	30		T
917 CULG	09	0006	0011	0021	N25	E35	.640	16963	11.6	15	-F	C	0011	50	.6	
918 CULG	09	0140	0142	0153	N30	W70	.945	16955	3.8	13	-F	C	0142	50		HT

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	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs	Type	Area Measurement Time (UT)	Appar (Disk)	Corr (Sq Deg)	Remarks
919	CULG	09	0215	0220	0224	N28	W71	.948	16955	3.8	9	-F		C	0220	30		TK
920	CULG	09	0333	0335	0341	N30	W71	.950	16955	3.8	8	-F		C	0335	30		TH
921	CULG	09	0336	0346U	0416U	S12	W39	.667	16958	6.2	40D	-F		C	0346	60	.8	
922	CULG	09	0503	0507	0511	N30	W72	.954	16955	3.8	8	-F		C	0507	40		TH
923	CULG	09	0511	0512	0519	N14	E35	.588	16965	11.8	8	-N		C	0512	50	.6	
924	CULG	09	0531	0534U IMP.1 NO : TACH	0546	N30	W73	.959	16955	3.8	15	?F		C	0534	70		TKF
925	CULG	09	0544	0551	0622	S12	W18	.404	16962	7.9	38	-F		C	0551	60	.7	G
926	YUNN	09	0621E		0640	N15	E78	.976	16974	15.1	19D	-N		P	0622	32		B
GRP85927		09	0728+2	0730+5	0737	N19	E83	.991	16974	15.5	9	-N						A
	YUNN	09	0728	0730	0733	N18	E82	.988	16974	15.5	5	-N		C		16		A
	CATA	09	0730	0735	0740	N20	E85	.995	16974	15.7	10	1F	2	C	0735	56		
928	HTPR	09	0758	0759	0806	N20	E77	.972	16974	15.1	8	-B		C	0759	50		
929	YUNN	09	0820	0820	0825	N16	E80	.983	16974	15.3	5	-N		C		32		D
GRP85930		09	0830E	0830 0905	0914D	N19	E79	.980	16974	15.3	44	-F						
	KHAR	09	0830E	0830	0911D	N20	E80	.983	16974	15.4	41D	-F		P	0833	40		D
	KHAR	09	0901E	0905	0914D	N18	E78	.976	16974	15.2	13D	-F		P	0907			D
931	KHAR	09	0938E		0945D	S13	E40	.683	16970	12.4	7D	-F		V	0938			D
932	KHAR	09	0946E	0950	1003D	N19	E88	.999	16974	16.0	17D	-F		P	0950			E
933	KHAR	09	1010E	1010	1014D	S13	E40	.683	16970	12.4	4D	-F		V	1010			D
GRP85934		09	1023+5	1031+1	1039	N18	E76	.968	16974	15.1	16	-N				35		D
	KHAR	09	1023E	1032	1041D	N18	E78	.976	16974	15.3	18D	-N		P	1032			D
	YUNN	09	1028	1031	1036	N16	E75	.964	16974	15.1	8	-N		C		32		D
	HTPR	09	1028		1033D	N20	E76	.969	16974	15.1	5D	-N		C	1033	40		
GRP85935		09	1102+2	1104+2	1110	N21	E82	.988	16974	15.6	8	-F						E
	KHAR	09	1102E	1104	1110D	N20	E84	.993	16974	15.8	8D	-F		V	1104			E
	HTPR	09	1104	1106	1110	N22	E80	.983	16974	15.5	6	-N		C	1106	20		
GRP85936		09	1222	1222+2	1233	N29	W71	.949	16955	4.2	11	-B						
	RAMY	09	1222	1222	1231	N29	W72	.954	16955	4.1	9	-B	3	C				
	ATHN	09	1223E	1224	1235	N29	W70	.933	16955	4.3	12D	-B	3	V	1224	64	2.3	
GRP85937		09	1226+0	1227+1	1230	N19	E73	.955	16974	15.0	4	-F						
	HTPR	09	1226	1228	1229	N20	E75	.964	16974	15.1	3	-F		C	1228	30		
	RAMY	09	1226	1227	1230	N19	E72	.950	16974	14.9	4	-N	3	C				
938	HTPR	09	1306	1307	1309	N22	E78	.976	16974	15.4	3	-F		C	1307	20		
939	HTPR	09	1313	1314	1323	N20	E74	.960	16974	15.1	10	-F		C	1314	10		
940	RAMY	09	1321	1326	1332	N28	W73	.958	16955	4.1	11	-N	3	C				
941	HTPR	09	1346	1347	1354	N20	E74	.960	16974	15.1	8	-N		C	1347	20		
942	HTPR	09	1410	1417	1530	S04	E43	.690	16973	12.8	80	-F		C	1417	30	.4	E
943	RAMY	09	1516	1516	1522	N24	W74	.961	16955	4.1	6	-N	3	C				
944	HTPR	09	1603	1606	1611	S14	W40	.688	16958	6.7	8	-F		C	1606	10	.1	
945	HTPR	09	1700	1700	1703	N20	E72	.950	16974	15.1	3	-N		C	1700	30		
946	HTPR	09	1754		1758D	N20	E72	.950	16974	15.1	4D	-N		C	1755	30		

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947 BIGB	09	1904	1905	1915	S13	E90	1.000	16978	16.5	11	-N	3 C	1905	40		
948 CULG	09	2256	2259	2306	N32	W80	.983	16955	4.0	10	-N	C	2259	30		
949 CULG	10	0005	0024	0036	N27	W87	.997	16955	3.5	31	?F	C	0024	80		
			IMP.1 NO : PALE													
950 CULG	10	0024	0026	0040	S02	E41	.661	16973	13.1	16	-N	C	0026	70	.9	T
951 YUNN	10	0112E		0115	S13	E82	.993	16977	16.2	30	-N	P	0112	32		
952 CULG	10	0239	0245	0320	N27	W88	.998	16955	3.5	41	1F	C	0245	100		K
GRP85953	10	0608+3	0614+1	0619	N15	E22	.413	16965	11.9	11	-F			60	.7	D
HTPR	10	0608	0615	0618	N15	E20	.385	16965	11.8	10	-F	C	0615	40	.4	
ABST	10	0611	0614	0619	N15	E24	.441	16965	12.1	8	-N	C	0614	87	1.0	D
GRP85954	10	0608+4	0614+2	0640	N26	W90	1.000	16955	3.5	32	1F			110		ADJ
HTPR	10	0608	0614	0635	N28	W90	1.000	16955	3.5	27	-F	* C	0614	30		
ABST	10	0612	0616	0644	N26	W90	1.000	16955	3.5	32	1N	* C	0616	131		ADJ
CATA	10	0620E	0620	0640D	N24	W90	1.000	16955	3.5	20D	1F	* P	0620	112		
955 KHAR	10	0730E	0730	0742D	S13	E90	1.000	16978	17.1	12D	-N	V	0730			H
GRP85956	10	0821E	0828	0854D	N20	E72	.950	16974	15.7	33	-F					E
			0842													
KHAR	10	0821E	0842	0854D	N18	E71	.944	16974	15.7	33D	-F	P	0842			ET
KHAR	10	0824E	0828	0831D	N23	E73	.956	16974	15.8	7D	-F	P				D
957 KHAR	10	0831E	0841	0857D	N18	E83	.991	16975	16.6	26D	-F	P				E
958 KHAR	10	0835E		0846D	N22	E13	.377	16969	11.3	11D	-F	P	0844	50	.5	D
959 KHAR	10	0854E	0854	0906D	N19	W90	1.000		3.6	12D	-F	P	0854			DH
GRP85960	10	0900	0901+2	0907	N16	E22	.420	16965	12.0	7	-F					D
ABST	10	0900	0903	0905	N16	E22	.420	16965	12.0	5	-N	C	0903	87	1.0	D
KHAR	10	0901E	0901	0908D	N17	E22	.427	16965	12.0	7D	-F	P				D
961 KHAR	10	0908E	0908	0911D	N18	E74	.959	16974	15.9	3D	-F	P				D
GRP85962	10	0930+6	0957+3	1055	S13	E90	1.000	16978	17.1	85	1N					ADJK
			1030+5													
KHAR	10	0821E	0935	1024D	S13	E90	1.000	16978	17.1	123D	1N	* P	1000	250		OQ
HTPR	10	0930	1030	1115	S13	E90	1.000	16978	17.1	105	-F	* C				
HTPR	10	0930	0957	1115	S13	E90	1.000	16978	17.1	105	-F	* C	1030	60		K
ABST	10	0936	0944	1009	S13	E90	1.000	16978	17.1	33	1F	* C	0944	105		ADJ
CATA	10	0955E	1000	1050D	S13	E90	1.000	16978	17.2	55D	1F	* P	1000	84		
ATHN	10	1033E	1035	1126	S18	E90	1.000	16978	17.2	53D	1B	* V	1035	95	7.0	
ATHN	10	1033E	1035U	1126	S18	E90	1.000	16978	17.2	53D	1B	* C				
RAMY	10	1104	1105	1109	S12	E90	1.000	16978	17.2	5	-B	* C				
963 KHAR	10	0954E	0957	1008D	N24	W90	1.000	16955	3.7	14D	-F	P	1007			DH
964 KHAR	10	0958E		1008D	N18	E71	.944	16974	15.7	10D	-F	P				DT
965 HTPR	10	1021	1034	1049	N17	E68	.926	16974	15.5	28	-B	C	1034	40	.9	
966 HTPR	10	1215	1223	1225	S13	E90	1.000	16978	17.3	10	-F	C	1223	50		
GRP85967	10	1230>9	1254+1	1306	S11	E90	1.000	16978	17.3	36	-N					
HTPR	10	1230	1254	1315	S13	E90	1.000	16978	17.3	45	-B	C	1254	50		
RAMY	10	1250	1255	1257	S10	E90	1.000	16978	17.3	7	-N	3 C				
968 HTPR	10	1255	1255	1258	N17	E67	.920	16974	15.6	3	-F	C	1255	10	.2	
GRP85969	10	1402+4	1405+6	1420	N19	E75	.964	16974	16.2	18	-N			50		E
HTPR	10	1402	1408	1420	N17	E75	.964	16974	16.2	18	-N	C	1408	50		E
RAMY	10	1404	1405	1416	N20	E75	.964	16974	16.2	12	-F	3 C				
WEND	10	1405E		1412D	N18	E75	.964	16974	16.2	7D	1N	P	1405	63		
HOLL	10	1406	1411	1428	N20	E78	.976	16974	16.4	22	-N	3 C				

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970 HOLL	10	1451	1455	1457	N18	E67	.920	16974	15.6	6	-F	3 C		35		
971 HOLL	10	1510	1512	1521	S11	E89	1.000	16978	17.3	11	-F	3 C		9		
972 HTPR	10	1545	1554	1610	S13	E90	1.000	16978	17.4	25	-N	C	1554	50		
973 HOLL	10	1700	1700	1709	S11	E89	1.000	16978	17.4	9	-F	3 C				
974 HTPR	10	1718	1728	1742	S12	W30	.556		8.5	24	-F	C	1728	10	.1	
GRP85975	10	1737+3	1740	1746	N17	E15	.338	16965	11.9	9	-N			45	.5	E
HTPR	10	1737		1746D	N16	E16	.340	16965	11.9	9D	-N	C	1740	60	.6	E
HOLL	10	1740	1740	1745	N18	E14	.338	16965	11.8	5	-N	3 C		28		
GRP85976	10	1739+2	1742+0	1758	S01	E31	.520	16973	13.1	19	-B					E
HTPR	10	1739		1746D	S03	E30	.511	16973	13.0	7D	-B	C	1740	80	.9	E
HOLL	10	1739	1742	1807	S01	E32	.535	16973	13.1	28	-B	3 C		186		
RAMY	10	1741	1742	1749	S01	E31	.520	16973	13.1	8	-N	3 C		22		
977 HOLL	10	1808	1808	1813	S11	E89	1.000	16978	17.4	5	-F	3 C		7		
978 HOLL	10	1809	1812	1814	N21	E66	.915	16974	15.7	5	-F	3 C		21		
979 HOLL	10	1817	1817	1821	S11	E89	1.000	16978	17.4	4	-F	3 C				
980 HOLL	10	1822	1833	1836	S11	E89	1.000	16978	17.4	14	-F	3 C		5		
GRP85981	10	1926+0	1927+1	1934	S11	E19	.407	16970	12.2	8	-F			40	.4	E
HOLL	10	1926	1928	1933	S11	E21	.432	16970	12.4	7	-F	3 C		26		
HUAN	10	1926	1927	1934	S11	E17	.382	16970	12.1	8	-F	1 C	1927	45	.5	E
982 HOLL	10	2006	2006	2017	N25	E63	.899	16974	15.6	11	-F	3 C		12		
	11	0320	0321	NO FLARE PATROL												
	11	0324	0330	NO FLARE PATROL												
983 ABST	11	0524	0539	0605	S11	E83	.994	16978	17.4	41	1F	C	0539	105		AEJ
984 ABST	11	0532	0534	0544	N20	E55	.828	16974	15.4	12	-N	C	0534	105	1.8	EJ
GRP85985	11	0607+5	0614	0649	N22	W07	.331	16964	10.7	42	-N			90	1.0	JK
			0620+1													
HTPR	11	0607E		0645	N22	W07	.331	16964	10.7	38D	-N	C	0623	60	.6	EK
ABST	11	0612	0614	0621	N22	W06	.326	16964	10.8	9	-F	C	0614	87	.9	D
ABST	11	0618	0621	0652	N23	W07	.346	16964	10.7	34	-N	C	0621	87	1.0	DJ
CATA	11	0620E	0620	0635D	N21	W08	.322	16964	10.7	15D	-F	2 P	0620	169	1.8	
PEKG	11	0634E	0635	0635D	N22	W08	.337	16964	10.7	1D	-N	P	0635	63	.7	D
GRP85986	11	0624	0625	0634	S13	E80	.988	16978	17.3	10	-F					EK
			0630													
HTPR	11	0624	0625	0634	S13	E80	.988	16978	17.3	10	-F	C	0630	30		EK
HTPR	11	0624	0630	0634	S13	E80	.988	16978	17.3	10	-F	C				
GRP85987	11	0656+1	0659	0715	S12	E90	1.000	16978	18.0	19	1N					ADJK
ISTA	11	0656		0714	S12	E90	1.000	16978	18.0	18	1B					K
ABST	11	0657	0659	0715	S12	E90	1.000	16978	18.0	18	1F	C	0659	114		ADJ
988 ABST	11	0812	0815	0826	S11	E90	1.000	16978	18.1	14	?F	C	0815	131		EJ
			IMP.1	NO : HTPR	YUNN	CATA										
989 KHAR	11	0820E	0820	0826D	N24	W90	1.000		4.6	6D	-N	P	0820			DH
GRP85990	11	0830+0	0834	0855	S12	E80	.988	16978	17.4	25	-N					DJ
			0843+2													
HTPR	11	0830	0845	0852	S12	E80	.988	16978	17.4	22	-F	C	0845	10		
ABST	11	0830	0834	0857	S12	E90	1.000	16978	18.1	27	1N	C	0834	87		DJ
KHAR	11	0832E	0843	0852D	S12	E80	.988	16978	17.4	20D	-N	P	0843			T

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GRP85991	11	0855+5	0900+3	0922	N22	E57	.848	16974	15.6	27	1N				110	2.1	EJL
ABST	11	0855	0901	0929	N24	E57	.852	16974	15.6	34	1N		C	0901	175	3.3	FJ
HTPR	11	0856	0903	0927	N22	E57	.848	16974	15.6	31	-B		C	0903	70	1.4	E
KHAR	11	0858E	0902	0925D	N23	E57	.850	16974	15.6	27D	-N		P	0902	80	1.6	EL
YUNN	11	0900	0901	0909	N20	E58	.854	16974	15.7	9	1B		C		145	2.9	E
CATA	11	0900	0900	0915	N22	E56	.840	16974	15.6	15	1F	2	C	0900	112	2.1	
GRP85992	11	0925+0	0925+1	0933	S13	E85	.998	16978	17.8	8	-N				60		D
HTPR	11	0925	0926	0933	S13	E80	.988	16978	17.4	8	-F		C	0926	10		
KHAR	11	0925	0926	0938	S14	E85	.998	16978	17.8	13	-N		P	0926	60		DT
ABST	11	0925	0925	0930	S13	E90	1.000	16978	18.1	5	1N		C	0925	87		D
GRP85993	11	1005	1006+2	1024	S12	E77	.979	16978	17.2	19	-N						E
HTPR	11	1005	1006	1020	S13	E75	.972	16978	17.0	15	-N		C	1006	30		
KHAR	11	1006E	1008	1028D	S12	E80	.988	16978	17.4	22D	1N		V	1008			ET
994 KHAR	11	1024E	1025	1029D	N20	E56	.837	16974	15.6	5D	-F		V	1025			D
GRP85995	11	1040+2	1053+2	1114	S13	E75	.972	16978	17.1	34	-B				50		D
HTPR	11	1040	1053	1110	S13	E75	.972	16978	17.1	30	-N		C	1053	50		
KHAR	11	1042	1055	1108D	S12	E80	.988	16978	17.4	26D	-B		P	1058	80		T
ATHN	11	1052	1055	1118	S15	E73	.972	16978	16.9	26	-B	3	V	1055	32	1.2	
ATHN	11	1052	1055	1118	S15	E73	.972	16978	16.9	26	-B	3	C				D
996 KHAR	11	1103E	1104	1108D	S17	W70	.952	16958	6.2	5D	-F		V	1106			D
GRP85997	11	1115	1122	1144	N19	E10	.309	16963	12.2	29	-F				70	.7	E
HTPR	11	1115	1122	1143	N17	E10	.282	16963	12.2	28	-F		C	1122	60	.6	E
KHAR	11	1127E	1127	1144D	N22	E10	.351	16963	12.2	17D	-F		P	1127	75	.8	E
998 KHAR	11	1131E	1131	1141	S12	E88	1.000	16978	18.1	10D	-F		P				DT
GRP85999	11	1149	1153 1204+4	1222	S12	E77	.979	16978	17.3	33	1N				100		K
HTPR	11	1149	1153	1201	S11	E72	.957	16978	16.9	12	-N		C	1153	50		
RAMY	11	1150E	1206	1222	S10	E72	.956	16978	16.9	32D	-N	3	C				
KHAR	11	1151E	1208	1227D	S12	E80	.988	16978	17.5	36D	1B		P	1208	150		ET
HTPR	11	1159	1204	1212	S15	E80	.989	16978	17.5	13	-B		C	1204	80		
LVOV	11	1200E	1207	1207D	S13	E80	.988	16978	17.5	7D	2N		P	1207	100		BCDK
HTPR	11	1208	1212	1220	S11	E71	.952	16978	16.8	12	-F		C	1212	40		
GRP86000	11	1250+6	1256+4	1333	S11	E72	.957	16978	16.9	43	1B						D
RAMY	11	1238	1258	1330	S10	E72	.956	16978	16.9	52	1B	3	C				
HTPR	11	1250	1256	1320	S11	E70	.947	16978	16.8	30	-B		C	1256	60		
KHAR	11	1251	1300	1445	S12	E79	.985	16978	17.5	114	2N		P	1300	130		CT
ATHN	11	1256	1259	1335	S15	E72	.968	16978	16.9	39	-B	3	V	1259	48	1.6	
ATHN	11	1256	1259	1335	S15	E72	.968	16978	16.9	39	-B	3	C				D
GRP86001	11	1350+3	1358+4	1440	S11	E71	.952	16978	16.9	50	-N						E
HOLL	11	1350	1402	1440	S11	E89	1.000	16978	18.3	95	1N	3	C		238		
HTPR	11	1351	1358	1430	S11	E70	.947	16978	16.8	39	-F	*	C	1358	30		E
RAMY	11	1353	1402	1441	S10	E71	.951	16978	16.9	48	-N	*	C				
GRP86002	11	1513+0	1514+1	1531	S10	E70	.946	16978	16.9	18	-B				40		
HTPR	11	1513	1515	1528	S12	E68	.936	16978	16.7	15	-B		C	1515	50	1.2	E
HOLL	11	1513	1514	1531	S10	E73	.961	16978	17.1	18	-B	3	C				D
RAMY	11	1513	1514	1543	S10	E70	.946	16978	16.9	30	-N	3	C		33		
GRP86003	11	1639+1	1644+0	1700	S12	E75	.971	16978	17.3	21	1B						E
HOLL	11	1639	1644	1715	S10	E75	.970	16978	17.3	36	1B	3	C		238		
RAMY	11	1640	1644	1700	S12	E74	.967	16978	17.2	20	1B	3	C				
HUAN	11	1645E		1652	S12	E76	.975	16978	17.4	7D	-N	1	P	1647	80		E
4 RAMY	11	1643	1643	1651	N14	E04	.188	16965	12.0	8	-F	3	C		24		
5 RAMY	11	1743	1743	1811	N24	E51	.799	16974	15.6	28	-F	3	C		24		
GRP86006	11	1853+0	1859+1	1925	S09	E72	.956	16978	17.2	32	2B						
RAMY	11	1853	1859	1923D	S10	E71	.951	16978	17.1	30D	2B	3	C		277		
HOLL	11	1853	1900	1925	S09	E74	.965	16978	17.3	32	2B	3	C				

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs	Type	Area Measurement Time (UT)	Appar (Disk)	Corr (Sq Deg)	Remarks
GRP86007	11	1908+1	1910+1	1920	N20	E46	.738	16974	15.2	12	-B				70	1.0	
RAMY	11	1908	1910	1920	N20	E45	.727	16974	15.2	12	-B	3	C		87		
BIGB	11	1908	1910	1920	N18	E47	.744	16974	15.3	12	-N	2	C	1910	50	.8	
HOLL	11	1909	1911	1919	N20	E46	.738	16974	15.2	10	-B	3	C		71		
8 HOLL	11	1945	1945	1951	S11	E74	.966	16978	17.4	6	-B	3	C				
9 HOLL	11	2047	2058	2112	S08	E74	.965	16978	17.4	25	-N	3	C		33		
10 HOLL	11	2136	2140	2146	S09	E71	.951	16978	17.2	10	-F	3	C				
11 HOLL	11	2153	2217	2249	S09	E70	.945	16978	17.2	56	?B	3	C		454		
			IMP.2 NO : BIGB PALE														
GRP86012	11	2310+8	2318+3	2332	S12	E69	.942	16978	17.1	22	-B						F
CULG	11	2310	2318	2330	S15	E70	.950	16978	17.2	20	1N		C	2318	140		FT
HOLL	11	2318	2321	2333	S10	E69	.940	16978	17.1	15	-B	3	C		64		
GRP86013	12	0128+2	0132+0	0155	N22	E47	.754	16974	15.6	27	-N						
CULG	12	0128	0132	0155	N23	E47	.757	16974	15.6	27	1F		C	0132	300	4.2	
BIGB	12	0130	0132	0141D	N22	E47	.754	16974	15.6	11D	-N	3	P	0132	50	.8	
GRP86014	12	0206	0230	0311	N21	E47	.751	16974	15.6	65	-F						
CULG	12	0206	0230U	0311	N20	E46	.738	16974	15.5	65	-F		C	0230	40	.6	
MITK	12	0239E		0244D	N22	E48	.764	16974	15.7	5D	-N		P	0239			
15 CULG	12	0336	0341	0355	N19	W12	.326	16965	11.2	19	-N		C	0341	100	1.0	
16 CULG	12	0411	0438	0505U	N19	W12	.326	16965	11.3	54D	-N		C	0438	190	1.9	KH
17 CULG	12	0437U	0443U	0520U	S13	E68	.937	16978	17.3	43D	1F		C	0443	160		T
18 ABST	12	0510	0511	0515	N18	W09	.285	16965	11.5	5	-F		C	0511	87	.9	DV
GRP86019	12	0528>9	0543 0604	0618	S13	E66	.925	16978	17.2	50	1F						
CULG	12	0528	0543	0619D	S13	E67	.931	16978	17.3	51D	1N		P	0543	180		FT
ABST	12	0559	0604	0616	S14	E65	.920	16978	17.1	17	1F		C	0604	105		D
20 ABST	12	0545E	0546	0559	S12	W70	.948		7.0	14D	?F		P	0546	114		EG
			IMP.1 NO : CULG TACH														
21 ABST	12	0614	0700	0808D	N18	W13	.324	16965	11.3	114D	-F		C	0700	175	1.9	FJ
22 ABST	12	0734	0737	0741	S11	W66	.923		7.4	7	?N		C	0737	105		DG
			IMP.1 NO : CATA														
23 ABST	12	0822E	0825	0901	N19	W14	.347	16965	11.3	39D	-F		P	0825	114	1.3	EJ
24 ABST	12	0845E	0849	0914	N14	W04	.186	16965	12.1	29D	-F		P	0849	131	1.4	FJ
GRP86025	12	0845E	0847+2	0857	S14	E57	.860	16978	16.6	12	-B						D
ATHN	12	0845E	0849	0857	S14	E57	.860	16978	16.6	12D	-B	3	V	0849	38	.8	
ATHN	12	0845E	0847U	0857	S14	E57	.839	16978	16.6	12D	-B	3	C				D
GRP86026	12	0926E	0926+6 0945	0951	S12	E61	.889	16978	17.0	25	-N				40	.9	DV
KHAR	12	0926E	0926	0946D	S12	E70	.948	16978	17.6	20D	-F	*	P	0926	40		DT
KHAR	12	0929	0932	0946D	S13	E65	.919	16978	17.3	17D	-F	*	P	0932	40		DT
ATHN	12	0944E	0945	0954	S14	E57	.860	16978	16.7	10D	-B	*	V	0945	38	.8	
ATHN	12	0944E	0945	0947	S14	E57	.860	16978	16.7	3D	-B	*	C				D
ABST	12	0952	0953	0955	S11	E61	.887	16978	17.0	3	-N	*	C	0953	87		DV
GRP86027	12	0947E	0948 1006	1022D	N19	W15	.356	16965	11.3	35	-N						J
ABST	12	0947E	0948	1008D	N19	W14	.347	16965	11.4	21D	-N		P	0948	122	1.3	EJ
KHAR	12	0951E	1006	1022D	N19	W16	.369	16965	11.2	31D	-F		P	1006	40	.4	D
28 KHAR	12	1006	1040	1058	S08	E70	.945	16978	17.7	52	?N		P	1040	120		ET
			IMP.1 NO : CATA														

H - ALPHA SOLAR FLARES

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs Type	Area Time (UT)	Measurement Appar (Disk)	Measurement Corr (Sq Deg)	Remarks
29 KHAR	12	1041	1041	1047	N26	W03	.377	16963	12.2	6	-N	P	1041	50	.6	D
GRP86030	12	1054	1058+5 1128	1135	N23	E47	.757	16974	16.0	41	1N			200	3.1	E
KHAR	12	1054	1058	1114	N24	E49	.780	16974	16.1	20	1B	P	1058	170	2.7	E
CATA	12	1055E	1100	1120	N23	E47	.757	16974	16.0	25D	1F	1 P	1100	169	2.6	
ATHN	12	1059E	1103	1143	N17	E44	.708	16974	15.8	44D	1B	3 V	1103	255	3.6	
ATHN	12	1059E	1103	1143	N17	E44	.708	16974	15.8	44D	1B	3 C		254		
KHAR	12	1124	1128	1135	N26	E49	.785	16974	16.1	11	-F	P	1128	40	.7	D
GRP86031	12	1110+1	1112 1125	1148	S12	E60	.881	16978	17.0	38	-N					
ATHN	12	1110E	1112	1201	S14	E56	.852	16978	16.7	51D	-B	3 V	1112	38	.7	
ATHN	12	1110E	1112U	1201	S14	E56	.852	16978	16.7	51D	-B	3 C				D
KHAR	12	1111	1125	1135	S11	E64	.909	16978	17.3	24	-N	P	1125	90		ET
GRP86032	12	1130	1132+2	1155	N17	W12	.301	16965	11.6	25	-B			170	1.8	E
KHAR	12	1130	1132	1154	N22	W13	.392	16965	11.5	24	1N	P	1132	210	2.3	E
ATHN	12	1132E	1134	1156	N13	W11	.244	16965	11.7	24D	-B	3 C		127		
ATHN	12	1132E	1134	1156	N13	W11	.244	16965	11.7	24D	-B	3 V	1134	127	1.4	
GRP86033	12	1225>9	1347	1354D	N18	W14	.335	16965	11.5	89	-F					
RAMY	12	1225	1506	1529	N17	W18	.373	16965	11.2	184	-N	3 C		118		
HOLL	12	1343	1347	1354	N19	W11	.316	16965	11.7	11	-F	3 C		86		
GRP86034	12	1335+3	1343+3 1402	1418	S10	E59	.870	16978	17.0	43	-B			90	1.8	D
RAMY	12	1335	1343	1421	S10	E59	.870	16978	17.0	46	-N	3 C		65		
HOLL	12	1338	1346	1356	S10	E62	.893	16978	17.2	18	-B	3 C		91		D
ATHN	12	1344E	1346	1400D	S14	E55	.843	16978	16.7	16D	1B	3 V	1346	191	3.7	
ATHN	12	1344E	1346	1400D	S14	E55	.843	16978	16.7	16D	1B	3 C				D
HOLL	12	1400	1402	1415	S10	E63	.901	16978	17.3	15	-N	3 C		38		
35 HOLL	12	1408	1417	1420	N21	E42	.697	16974	15.7	12	-F	3 C		47		
36 HOLL	12	1527	1531	1540	N21	E42	.697	16974	15.8	13	-N	3 C		54		
GRP86037	12	1541+2	1543+3	1607	S10	E60	.878	16978	17.2	26	1B			190	3.9	D
HOLL	12	1541	1543	1605	S10	E60	.878	16978	17.2	24	1B	3 C		183		D
RAMY	12	1541	1543	1607D	S10	E60	.878	16978	17.2	26D	1B	3 C		157		
BIGB	12	1543	1546	1609	S12	E60	.881	16978	17.2	26	1N	3 C	1546	240	4.9	
GRP86038	12	1612+2	1619+4	1640	S10	E64	.908	16978	17.5	28	-N			35	.8	
HOLL	12	1612	1623	1636	S10	E66	.922	16978	17.6	24	-N	3 C		42		
RAMY	12	1614	1619	1644	S11	E63	.902	16978	17.4	30	-N	3 C		32		
GRP86039	12	1721>9	1736+0	1805	S09	E59	.868	16978	17.1	44	-B					D
HOLL	12	1721	1736	1818	S09	E59	.868	16978	17.1	57	1B	3 C		162		D
RAMY	12	1736	1736	1752	S10	E59	.870	16978	17.2	16	-B	3 C		67		
GRP86040	12	1801+3	1804+1	1826	N17	W19	.386	16965	11.3	25	-N			100	1.1	
HOLL	12	1801	1804	1825	N17	W19	.386	16965	11.3	24	-B	3 C		132		
BIGB	12	1802	1804	1830	N17	W19	.386	16965	11.3	28	-N	3 C	1804	70	.8	
RAMY	12	1804	1805	1826	N17	W20	.399	16965	11.3	22	-N	3 C		98		
41 HOLL	12	1815	1816	1819	N21	E40	.674	16974	15.8	4	-F	3 C		20		
GRP86042	12	1822+1	1824+0	1840	S11	E65	.916	16978	17.6	18	1B			140		D
HOLL	12	1822	1824	1838	S11	E66	.923	16978	17.7	16	1B	3 C		159		D
RAMY	12	1823	1824	1842	S12	E65	.917	16978	17.6	19	-B	3 C		116		D
GRP86043	12	1923+0	1933+0	1950	S12	E60	.881	16978	17.3	27	-N			30	.6	D
RAMY	12	1923	1933	1953	S12	E60	.881	16978	17.3	30	-N	3 C		27		
HOLL	12	1923	1933	1946	S11	E61	.887	16978	17.4	23	-B	3 C		28		
HUAN	12	1941E		1942D	S13	E57	.858	16978	17.1	1D	-F	1 P	1941	25	.5	D
44 RAMY	12	1938	1938	2001	S12	E71	.953	16979	18.1	23	-F	3 C				
45 RAMY	12	2003	2004	2010	S09	E58	.859	16978	17.2	7	-F	3 C		21		
46 RAMY	12	2025	2032	2040	N22	E39	.667	16974	15.8	15	-F	3 C		21		

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JULY 1980

Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs Type	Area Measurement Time (UT)	Area Measurement Appar (Disk)	Area Measurement Corr (Sq Deg)	Remarks
47 RAMY	12	2044	2044	2052	S10	E56	.843	16978	17.1	8	-B	3 C		24		D
48 CULG	12	2248E	2248E	2303	S15	E58	.870	16978	17.3	15D	-F	P	2248	50	1.0	
49 CULG	12	2308	2315	2345	S13	E50	.793	16978	16.7	37	-F	C	2315	60	1.0	H
50 CULG	13	0114	0117U	0200	S15	E55	.845	16978	17.2	46	?F	C	0117	120	2.3	F
		IMP.1 NO : PALE YUNN BIGB MITK														
51 ABST	13	0548	0553	0606	N17	W16	.347	16965	12.0	18	-F	C	0553	114	1.3	FJ
GRP86052	13	0548>9	0556 0632	0909	S14	E53	.825	16978	17.2	201	1F					J
CULG	13	0548U	0556	0617D	S15	E54	.837	16978	17.3	29D	1N	* P	0556	200	3.6	F
ABST	13	0607	0607	0909	S15	E53	.828	16978	17.2	182	-F	* C	0607	87	1.6	E
ABST	13	0628	0632	0708	S13	E53	.823	16978	17.2	40	1F	* C	0632	175	3.3	DJ
GRP86053	13	0929	0933+3	0955	S10	E53	.816	16978	17.4	26	-F					V
ABST	13	0929	0933	0955	S10	E56	.844	16978	17.6	26	-F	C	0933	87	1.6	D
ABST	13	0935	0936	0944	S11	E50	.788	16978	17.1	9	-F	C	0936	87	1.5	DV
GRP86054	13	1030+0	1034+0	1054	S15	E60	.886	16978	17.9	24	-B			30	.6	D
ATHN	13	1030	1034	1054	S15	E60	.886	16978	17.9	24	-B	3 C		32		D
ATHN	13	1030	1034	1054	S15	E60	.886	16978	17.9	24	-B	3 V	1034	32	.7	
55 RAMY	13	1113	1117	1136	S10	E70	.946	16979	18.7	23	-N	3 C				
56 RAMY	13	1243	1333	1350	S10	E69	.941	16979	18.7	67	-N	3 C		23		
57 RAMY	13	1407	1408	1416	S12	E48	.770	16978	17.2	9	-N	3 C		30		
58 RAMY	13	1413	1413	1427	N23	E28	.545	16974	15.7	14	-F	3 C		19		
GRP86059	13	1431+1	1434+4	1443	S13	E48	.773	16978	17.2	12	-N					
RAMY	13	1431	1438	1442	S12	E47	.760	16978	17.1	11	-N	3 C		25		
BIGB	13	1432	1434	1443	S15	E49	.790	16978	17.3	11	-B	2 C	1434	90	1.4	
60 RAMY	13	1451	1522	1523D	S09	E50	.783	16978	17.4	32D	-B	3 C		45		
61 HUAN	13	1604E		1613	S15	E53	.828	16978	17.6	9D	-F	1 P	1605	40	.7	
62 RAMY	13	1634	1634	1647	S10	E49	.775	16978	17.4	13	-N	3 C		22		
GRP86063	13	1717+1	1718+2	1751	S10	E46	.742	16978	17.2	34	-B			120	1.8	D
BIGB	13	1717	1718	1754	S13	E47	.763	16978	17.2	37	-B	3 C	1718	80	1.2	
RAMY	13	1718	1718	1747	S10	E45	.731	16978	17.1	29	-B	3 C		155		D
HOLL	13	1719E	1720U	1721D	S10	E46	.742	16978	17.2	2D	-B	2 C		127		
GRP86064	13	1753+8	1804+1	1813	S09	E47	.751	16978	17.3	20	-N			20	.3	
HOLL	13	1753	1804	1814	S09	E49	.772	16978	17.4	21	-B	3 C		22		
RAMY	13	1801	1805	1811	S10	E46	.742	16978	17.2	10	-N	3 C		19		
GRP86065	13	1827+9	1836	1851	S10	E49	.775	16978	17.4	24	-F					
HOLL	13	1827	1851	1855	S11	E50	.788	16978	17.5	28	-N	3 C		36		
RAMY	13	1836	1836	1846	S10	E49	.775	16978	17.4	10	-F	3 C		17		
GRP86066	13	1914+1	1920+1	2004	S15	E49	.790	16978	17.5	50	-B			100	1.6	E
HOLL	13	1914	1921	2017	S13	E50	.793	16978	17.6	63	-B	3 C		96		
BIGB	13	1915	1920	1951	S16	E49	.793	16978	17.5	36	-B	2 C	1920	100	1.6	
HUAN	13	1919E		1926D	S15	E49	.790	16978	17.5	7D	-N	2 P	1920	40	.7	E
GRP86067	13	1951	2018	2118	S13	E57	.858	16979	18.1	87	1N					E
BIGB	13	1951	2018	2118	S14	E56	.852	16979	18.0	87	1N	2 C	2018	210	3.9	
HUAN	13	2013E		2017D	S12	E58	.865	16979	18.2	4D	-F	1 P				E
GRP86068	13	2142>9	2157+3	2219	S12	E48	.770	16978	17.5	37	-N					FI
CULG	13	2142E	2200	2209D	S16	E48	.783	16978	17.5	27D	1N	* P	2200	260	3.9	FI
HOLL	13	2154	2157	2219	S09	E48	.762	16978	17.5	25	-N	* C		33		
69 CULG	13	2144	2146	2153	S25	E24	.606	16977	15.7	9	-F	C	2146	60	.8	H

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs	Type	Area Measurement Time (UT)	Appar (Disk)	Corr (Sq Deg)	Remarks
	13	3945	0000	NO FLARE PATROL													
70 PEKG	14	0135	0136	0138	S14	E41	.702	16978	17.1	3	-N		C	0136	92	1.4	E
GRP86071	14	0150+0	0151+1	0158	S12	E41	.693	16978	17.2	8	-B				120	1.7	E
YUNN	14	0150	0152	0155	S13	E40	.686	16978	17.1	5	-N		C		96	1.4	
PEKG	14	0150	0151	0200	S11	E43	.712	16978	17.3	10	1B		C	0151	147	2.1	E
	14	0204	0230	NO FLARE PATROL													
72 PEKG	14	0316	0317	0320	S15	E41	.706	16978	17.2	4	-B		C	0317	50	.7	D
73 YUNN	14	0429	0436	0440	S12	E42	.705	16978	17.3	11	-F		C		32	.5	
GRP86074	14	0453+1	0454+2	0502	S11	E40	.677	16978	17.2	9	-F				45	.6	E
PEKG	14	0453	0454	0458	S11	E40	.677	16978	17.2	5	-F		C	0454	29	.4	E
YUNN	14	0454	0456	0505	S12	E41	.693	16978	17.3	11	-F		C		64	.9	E
GRP86075	14	0512+0	0514+4	0539	S12	E44	.727	16978	17.5	27	-F						D
YUNN	14	0512	0518	0539	S12	E44	.727	16978	17.5	27	-F		C		32	.5	
ABST	14	0512	0514	0523D	S13	E44	.731	16978	17.5	11D	-F		P	0512	87	1.3	D
76 PEKG	14	0544	0548	0600	S13	E43	.720	16978	17.5	16	-N		C	0548	71	1.1	E
GRP86077	14	0546+7	0548 0556+1	0601	N22	E20	.443	16974	15.7	15	-N				70	.8	G
ABST	14	0502E	0556	0603	N21	E19	.422	16974	15.6	61D	-N	*	P	0556	87	1.0	D
PEKG	14	0546	0548	0601	N23	E20	.453	16974	15.7	15	-N	*	C	0548	46	.5	E
YUNN	14	0553	0557	0600	N22	E22	.466	16974	15.9	7	-F	*	C		48	.6	G
78 YUNN	14	0744	0752	0759	S16	E41	.711	16978	17.4	15	-N		C		80	1.2	
GRP86079	14	0814+8	0825+2 0835	0846	S15	E43	.728	16978	17.6	32	2N						FHJK
YUNN	14	0814	0826	0842	S17	E43	.737	16978	17.6	28	3B		C		984	15.1	HJ
PURP	14	0816	0835	0855	S17	E41	.716	16978	17.4	39	1B		C				
PURP	14	0816	0848	0855	S17	E41	.716	16978	17.4	39	1B		C				KH
ABST	14	0818	0827	0928	S17	E43	.737	16978	17.6	70	3N		C	0827	960	14.8	DJK
CATA	14	0820	0827	0845D	S17	E44	.747	16978	17.6	25D	3F	2	P	0827	1293	20.1	H
PEKG	14	0822	0826	0841	S13	E43	.720	16978	17.6	19	2B		V				F
ATHN	14	0822	0825	0842D	S13	E43	.720	16978	17.6	20D	1B	3	V	0825	239	3.6	
ATHN	14	0822	0825	0842D	S13	E43	.720	16978	17.6	20D	1B	3	C		238		
ABST	14	0826E	0827	0902D	S20	E47	.789	16978	17.9	36D	1N		C	0827	175	2.7	FJ
MANI	14	0827E	0827U	0833D	S10	E43	.709	16978	17.6	6D	1N	1	V		250	3.7	F
ISTA	14	0829E		0845	S16	E45	.753	16978	17.7	16D	2B						BL
80 ABST	14	0826	0827	0902	S15	E53	.828	16979	18.3	36	?F		C	0827	175	3.1	EJ
			IMP.1 NO : YUNN ABST PURP CATA														
81 CATA	14	1055	1100	1110	S23	E76	.981	16983	20.2	15	-F	2	C	1100	45		
GRP86082	14	1359+0	1401+1	1407	S13	E35	.626	16978	17.2	8	-F				30	.4	
HUAN	14	1359	1402	1408	S14	E35	.632	16978	17.2	9	-F	1	C	1402	30	.4	
HOLL	14	1359	1401	1406	S13	E35	.626	16978	17.2	7	-N	2	C		30		
83 HOLL	14	1413	1416	1435	S08	E56	.840	16979	18.8	22	-F	3	C		24		
GRP86084	14	1459+0	1500+3	1518	N21	E14	.368	16974	15.7	19	-N				30	.3	D
RAMY	14	1459	1500	1518	N22	E15	.390	16974	15.7	19	-N	3	C		31		
HUAN	14	1459		1507	N21	E14	.368	16974	15.7	8	-F	1	C	1500	20	.2	D
HOLL	14	1459	1503	1519	N21	E14	.368	16974	15.7	20	-N	3	C		37		
85 HUAN	14	1618		1620	S14	E34	.620	16978	17.2	2	-F	1	C				
GRP86086	14	1708+1	1710	1727	S12	E36	.633	16978	17.4	19	-F				30	.4	D
RAMY	14	1708	1710	1715D	S10	E36	.623	16978	17.4	7D	-N	3	C		36		
HUAN	14	1709		1727	S14	E37	.656	16978	17.5	18	-F	1	C	1714	20	.3	D
87 HOLL	14	1819	1820	1831	N21	E12	.349	16974	15.7	12	-F	3	C		42		
88 HOLL	14	1844	1845	1853	S10	E54	.825	16979	18.8	9	-N	3	C		52		

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs Type	Area Time (UT)	Measurement Appar (Disk)	Corr (Sq Deg)	Remarks
89 HOLL	14	1948	1951	2004	S09	E34	.593	16978	17.4	16	-N	3 C		63		
	14	2143	2157	NO FLARE PATROL												
90 PURP	14	2320	2326	2330	N17	W40	.659	16965	12.0	10	?N	C				
			IMP.1	NO : HOLL												
91 PURP	15	0029	0031	0037	S17	E30	.595	16978	17.3	8	?B	C				
			IMP.1	NO : BIGB MITK YUNN												
92 BIGB	15	0129	0130	0143	S16	E31	.599	16978	17.4	14	-B	3 C	0130	40	.5	
GRP86093	15	0332	0338	0351	S28	E87	1.000	16991	21.7	19	1N			110		EY
MITK	15	0332	0338	0341D	S29	E90	1.001	16991	21.9	9D	1N	C	0338	100		E
TACH	15	0340E		0351	S28	E85	.999	16991	21.5	11D	1N	C	0340	132		Y
GRP86094	15	0402+0	0405+0	0424	S13	E49	.784	16979	18.8	22	1N			170	2.7	E
YUNN	15	0402	0405	0423	S14	E48	.777	16979	18.8	21	1N	C		161	2.6	
TACH	15	0402	0405	0424	S12	E50	.791	16979	18.9	22	1N	C	0405	177	2.9	E
95 YUNN	15	0452E	0455	0457	N21	W50	.780	16965	11.5	5D	-N	C		64	1.0	
96 CATA	15	0845	0845	0850	S10	E20	.415	16978	16.9	5	-F	2 C	0845	68	.8	
GRP86097	15	0914E	0916	0947	S15	E27	.544	16978	17.4	33	-N					
ATHN	15	0914E	0916	0942	S16	E28	.564	16978	17.5	28D	-N	2 V	0916	95	1.2	
YUNN	15	0933E	0933	0951	S14	E26	.524	16978	17.3	18D	-N	C		32	.4	
98 YUNN	15	0952E	0955	1000	S16	E26	.541	16978	17.4	8D	-N	C		64	.8	
99 HTPR	15	1315		1334D	N20	E16	.376	16975	16.8	19D	-F	C	1330	20	.2	
100 HOLL	15	1354	1355	1358	S17	E84	.997	16985	21.9	4	-F	3 C				
GRP86101	15	1427+0	1427+0	1447	N21	E01	.288	16974	15.7	20	-N			40	.4	
HOLL	15	1427	1427	1448	N21	E01	.288	16974	15.7	21	-N	4 C		53		
RAMY	15	1427	1427	1446	N21	E01	.288	16974	15.7	19	-N	3 C		31		
102 RAMY	15	1442	1443	1447	S11	E22	.450	16978	17.3	5	-F	3 C		36		
103 HOLL	15	1458	1459	1502	S18	E85	.998	16985	22.0	4	-F	3 C				
104 RAMY	15	1714	1716	1724	S11	E21	.437	16978	17.3	10	-F	3 C		24		
GRP86105	15	1826+0	1827+1	1858	S14	E21	.465	16978	17.3	32	1B			210	2.4	
HOLL	15	1826	1827	1853	S13	E21	.456	16978	17.3	27	1B	3 C		225		
BIGB	15	1826	1828	1902	S15	E21	.475	16978	17.3	36	1B	3 C	1828	190	2.1	
106 HOLL	15	2037	2051	2105	N20	W04	.278	16974	15.6	28	-F	3 C		40		
107 HOLL	15	2059	2100	2102	S12	E22	.458	16978	17.5	3	-F	3 C		44		
108 CULG	15	2141	2142	2148	N17	W57	.841	16965	11.6	7	-N	C	2142	80	1.4	
109 HOLL	15	2142	2144	2146	S16	E19	.464	16978	17.3	4	-F	3 C		26		
GRP86110	15	2241+5	2248+3	2309	S15	E18	.443	16978	17.3	28	-B			110	1.2	
HOLL	15	2241	2248	2309	S15	E18	.443	16978	17.3	28	-B	3 C		104		
BIGB	15	2243	2250	2342	S15	E18	.443	16978	17.3	59	-B	3 C	2250	90	1.0	
CULG	15	2246	2251	2307	S15	E18	.443	16978	17.3	21	-N	C	2251	140	1.5	
111 CULG	16	0015	0023	0039	N21	E58	.854	16981	20.4	24	-F	C	0023	80	1.4	
GRP86112	16	0021	0024	0040	S12	E17	.400	16978	17.3	19	-N					E
HOLL	16	0021	0024	0040	S12	E20	.435	16978	17.5	19	-N	3 C		26		
VORO	16	0024E		0027D	S13	E15	.389	16978	17.1	3D	-N	P	0024	99	1.1	E
GRP86113	16	0120>9	0132+4	0207	N16	W53	.802	16965	12.1	47	1N			160	2.7	F
CULG	16	0120	0132	0218	N18	W53	.804	16965	12.1	58	1N	C	0132	170	2.9	F
PEKG	16	0130	0136	0155	N15	W54	.810	16965	12.0	25	1N	C	0136	151	2.6	F

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs	Type	Area Measurement Time (UT)	Area Measurement Appar (Disk)	Area Measurement Corr (Sq Deg)	Remarks
114 CULG	16	0143	0203	0254	S22	E18	.526	16980	17.4	71	-N		C	0203	160	1.8	F
115 VORO	16	0218	0219	0226	S14	E15	.401	16978	17.2	8	-N		C	0219	116	1.3	EJK
	16	0301	0308	NO FLARE PATROL													
116 CULG	16	0324	0333	0357	S30	E60	.919	16983	20.6	33	-N		C	0333	40	.9	
117 ABST	16	0508	0515	0523	N05	E69	.932	16984	21.4	15	?F		C	0515	131		EJ
			IMP.1 NO : CULG														
118 ABST	16	0510	0515	0520	S17	E10	.400	16978	17.0	10	-F		C	0515	87	.9	D
119 ABST	16	0512	0514	0525	N11	E54	.807	16981	20.3	13	-F		C	0514	87	1.5	D
GRP86120	16	0525>9	0542+3	0556	N26	W71	.946	16964	10.9	31	1N				90		D
CULG	16	0525	0545	0602	N25	W73	.955	16964	10.8	37	1N		C	0545	100		
ABST	16	0536	0542	0550	N28	W70	.941	16964	11.0	14	1N		C	0542	87		D
121 CULG	16	0549	0552	0606	S13	E05	.311	16978	16.6	17	-N		C	0552	70	.7	HT
122 ABST	16	0631	0635	0644D	S16	E14	.417	16978	17.3	13D	-F		P	0635	87	1.0	D
GRP86123	16	0635+1	0638+2	0650	S19	E71	.959	16985	21.6	15	1F				80		D
CATA	16	0635	0640	0650	S20	E72	.965	16985	21.7	15	1F	2	C	0640	84		
ABST	16	0636	0638	0644D	S18	E71	.968	16985	21.6	8D	1N		P	0638	87		D
124 KHAR	16	0805E	0806	0831D	S21	E50	.821	16983	20.1	26D	-F		V	0806			BD
125 KHAR	16	0815E		0825D	S22	E16	.510	16980	17.5	10D	-F		V	0815			E
GRP86126	16	0903+2	0904+1	0911	S16	E11	.393	16978	17.2	8	-F				80	.9	D
ABST	16	0903	0904	0912D	S17	E09	.394	16978	17.1	9D	-F		P	0904	87	1.0	D
CATA	16	0905	0905	0910	S16	E14	.417	16978	17.4	5	-F	2	C	0905	68	.8	
127 KHAR	16	1014E		1025D	S12	E21	.447	16978	18.0	11D	-F		V	1014			D
128 HUAN	16	1511	1521	1539	S25	E42	.769	16983	19.8	28	-N	1	C	1521	25	.4	D
129 HUAN	16	1734		1742	S10	E25	.481	16979	18.6	8	-F	1	C				
GRP86130	16	2147+2	2153+3	2231D	N23	W17	.420	16974	15.6	44	1N				240	2.7	
CULG	16	2147U	2156	2231	N24	W18	.441	16974	15.6	44D	1N		C	2156	280	3.1	
BIGB	16	2149	2153	2318	N22	W17	.408	16974	15.6	89	1N	3	C	2153	200	2.2	
131 CULG	16	2213	2214	2234	S15	E03	.336	16978	17.2	21	-N		C	2214	90	.9	
132 CULG	17	0052	0114	0133	N15	E40	.616		20.0	41	-F		C	0114	40	.5	HG
133 CULG	17	0057	0101	0112	S20	E52	.835	16985	20.9	15	-N		C	0101	40	.7	
134 VORO	17	0155	0157	0217	S24	E35	.700	16983	19.7	22	-N		C	0157	81	1.2	DJL
135 CULG	17	0212	0214	0221	S14	W06	.333	16978	16.6	9	-N		C	0214	40	.4	HT
GRP86136	17	0234+1	0236+3	0247	N15	E82	.988	16989	23.3	13	-F						EHJ
CULG	17	0234	0239	0245	N14	E85	.995	16989	23.5	11	-F		C	0239	30		
VORO	17	0235	0236	0248	N16	E80	.982	16989	23.1	13	-N		C	0236	81		EHJ
137 CULG	17	0357	0359	0410	S14	W05	.328	16978	16.8	13	-N		C	0359	160	1.7	HT
138 CULG	17	0405	0407	0414	N19	W72	.948	16965	11.8	9	-F		C	0407	40		
139 CULG	17	0437	0440	0451	N01	E50	.767	16984	20.9	14	-N		C	0440	120	1.8	
140 CULG	17	0438	0447	0502	S30	E43	.806	16983	20.4	24	-N		C	0447	60	1.0	
141 CULG	17	0507	0528	0611U	S34	E53	.891	16986	21.2	64D	-F		C	0528	70	.9	
142 ABST	17	0507	0508	0535	N06	E55	.817	16984	21.3	28	-F		C	0508	87	1.6	D

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs	Type	Area Time (UT)	Measurement Appar (Disk)	Measurement Corr (Sq Deg)	Remarks
143 CULG	17	0526	0530	0540	S14	W06	.333	16978	16.8	14	-N		C	0530	80	.8	HT
GRP86144	17	0536+7	0604+9 0702+8	0752	S11	E06	.286	16978	17.7	136	2N						FIJL
CULG	17	0536	0610	0623D	S11	E07	.292	16978	17.8	47D	3B		P	0610	1800	19.6	USFI
ABST	17	0543	0613	0805	S12	E05	.296	16978	17.6	142	2N		C	0613	524	5.7	FJ
TACH	17	0543	0604	0641D	S09	E07	.262	16978	17.8	58D	3F		C	0604	1503	16.2	EU
BUCA	17	0558E	0710	0744	S11	E06	.286	16978	17.7	106D	3N		C	0710	1504	16.1	LU
ATHN	17	0600E		0651	S10	E06	.270	16978	17.7	51D	-B	3	C		127		
ATHN	17	0600E		0651	S10	E06	.270	16978	17.7	51D	-B	3	V		127	1.4	
CATA	17	0610E	0610	0645D	S11	W08	.299	16978	16.7	35D	2F	2	P	0610	843	9.1	
YUNN	17	0702E	0702	0817	S11	E04	.276	16978	17.6	75D	1N		P		401	4.3	
HTPR	17	0706E		0810	S13	E06	.317	16978	17.7	64D	1N		C	0728	400	4.0	BEFI
CATA	17	0715E	0725	0730D	S15	W01	.334	16978	17.2	15D	-F	2	P	0725	140	1.5	
145 HTPR	17	0808	0814	0825	N15	E75	.963	16989	23.0	17	-F		C	0814	20		
GRP86146	17	0915+2	0918+1	0928	S28	E35	.729	16983	20.0	13	-F						J
ABST	17	0915	0919	0925	S31	E34	.744	16983	19.9	10	-F		C	0919	87	1.3	DJ
HTPR	17	0917	0918	0930	S25	E37	.725	16983	20.2	13	-F		C	0918	20	.3	E
GRP86147	17	0948+4	0954+2	1001	S26	E34	.706	16983	20.0	13	-F						EJ
HTPR	17	0948	0954	1001	S24	E36	.709	16983	20.1	13	-F		C	0954	20	.3	E
ABST	17	0952	0956	1001	S28	E33	.713	16983	19.9	9	-F		C	0956	131	1.8	EJ
GRP86148	17	0954+0	0956+3	1007	S09	E15	.344	16979	18.5	13	-F						EJ
HTPR	17	0954	0959	1020	S09	E10	.289	16979	18.2	26	-F		C	0959	30	.3	E
ABST	17	0954	0956	1001	S10	E15	.355	16979	18.5	7	-F		C	0956	131	1.4	EJ
YUNN	17	0959E	0959	1007	S08	E16	.346	16979	18.6	8D	-N		P		80	.9	
149 HTPR	17	1038	1043	1046	N15	E74	.958	16989	23.0	8	-N		C	1043	30		
150 KHAR	17	1054E	1054	1135D	N17	E76	.967	16989	23.2	41D	?F		P	1101	180		D
			IMP.1 NO : HTPR YUNN														
151 KHAR	17	1132E	1142	1152D	N21	E33	.588	16981	20.0	20D	-F		P	1137	50	.6	E
152 KHAR	17	1140E	1145	1157D	S14	W04	.324	16978	17.2	17D	-F		P	1147	90	1.0	D
153 KHAR	17	1153E	1155	1210D	N15	E47	.736	16987	21.0	17D	-F		V	1155			D
GRP86154	17	1213	1214+0	1220	N14	E49	.757	16987	21.2	7	-F						
HTPR	17	1213	1214	1219	N13	E50	.767	16987	21.3	6	-F		C	1214	20	.3	E
KHAR	17	1214E	1214	1221D	N15	E48	.747	16987	21.1	7D	-N		P	1216	110	1.8	D
GRP86155	17	1332+0	1335+2	1420	N21	W26	.502	16974	15.6	48	-N				120	1.4	E
RAMY	17	1332	1335	1400D	N21	W27	.515	16974	15.5	28D	-N	3	C		134		
HTPR	17	1332	1337	1420	N21	W28	.527	16974	15.5	48	-N		C	1337	120	1.3	E
HTPR	17	1332	1335	1420	N23	W21	.461	16974	16.0	48	-N		C	1335	80	.9	E
156 ATHN	17	1346E	1349	1359	N16	E35	.591	16981	20.2	13D	-N	3	V	1349	64	.8	
157 HTPR	17	1517	1517	1522	S15	W08	.359	16978	17.0	5	-N		C	1517	20	.2	
158 HTPR	17	1526	1530	1540	S25	E34	.698	16983	20.2	14	-F		C	1530	20	.2	E
159 HTPR	17	1720	1740	1800	N13	E49	.756	16987	21.4	40	-F		C	1740	30	.5	
	17	1815	1818	NO FLARE PATROL													
	17	1851	1950	NO FLARE PATROL													
	17	2030	2039	NO FLARE PATROL													
	17	2057	2105	NO FLARE PATROL													
	17	2150	2209	NO FLARE PATROL													
160 HOLL	17	2155	2155	2214	S09	E11	.299	16979	18.7	19	-F	3	C		61		
161 HOLL	17	2157	2158	2210	S14	W06	.333	16978	17.5	13	-N	3	C		74		
	17	2215	2226	NO FLARE PATROL													
162 CULG	17	2315	2319	2337	S23	E29	.636	16983	20.1	22	1N		C	2319	150	2.0	

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp		Obs Type	Area Time (UT)	Measurement Appar (Disk)	Corr (Sq Deg)	Remarks
163 CULG	17	2348	2352	0000	N20	W88	.998	16965	11.4	12	-F		C	2352	40		
164 HOLL	18	0018	0021	0026D	S21	E31	.639	16983	20.3	8D	-N	2	C		49		
165 CULG	18	0203	0204	0209	S14	W17	.424	16978	16.8	6	-N		C	0204	70	.8	T
166 CULG	18	0207	0210	0220	S28	E23	.635	16983	19.8	13	-F		C	0210	40	.4	HT
167 CULG	18	0429	0434	0439	S28	E22	.628	16983	19.8	10	-N		C	0434	140	1.8	HT
168 CULG	18	0433	0435	0453	S16	W13	.411	16978	17.2	20	-F		C	0435	80	.9	TK
169 CULG	18	0439	0444	0454	N07	E35	.572	16984	20.8	15	-F		C	0444	80	1.0	
170 CULG	18	0451	0458	0508	S11	W22	.452	16978	16.6	17	-B	*	C	0458	160	1.8	
171 CULG	18	0517	0526	0536	N17	E24	.448	16981	20.0	19	-N		C	0526	60	.7	
GRP86172	18	0536>9	0613+2	0617D	S14	W18	.435	16978	16.9	41	-N						E
HTPR	18	0536	0615	0658	S15	W19	.457	16978	16.8	82	-F		C	0615	20	.2	E
CULG	18	0611	0613	0617	S13	W18	.424	16978	16.9	6	-B		C	0613	60	.7	T
GRP86173	18	0631	0633+2	0640	S26	E19	.584	16983	19.7	9	-F						EJ
ABST	18	0631	0635	0640	S25	E23	.603	16983	20.0	9	-F		C	0635	131	1.6	EJ
ABST	18	0631	0633	0640	S28	E15	.583	16983	19.4	9	-F		C	0633	87	1.0	DJ
GRP86174	18	0644E	0646	0710	S25	E78	.988	16992	24.1	26	1F				100		D
ABST	18	0644E	0646	0655D	S30	E80	.994	16992	24.3	11D	1F		P	0646	87		D
CATA	18	0650E	0650	0710	S20	E76	.980	16992	24.0	20D	1F	2	P	0650	112		
175 HTPR	18	0653	0655	0717	S24	E28	.636	16983	20.4	24	-B		C	0655	80	.9	E
GRP86176	18	0654>9	0717+1	0815	S15	E07	.355	16979	18.8	81	-B						JK
ABST	18	0654E	0718	0755D	S15	E05	.345	16979	18.7	61D	1N		P	0718	262	2.9	FJ
HTPR	18	0712	0717	0815	S15	E09	.367	16979	19.0	63	-B		C	0717	100	1.0	EK
177 CATA	18	0715	0725	0805	S13	W08	.331	16978	17.7	50	?F	2	C	0725	197	2.2	
IMP.1 NO : ABST HTPR																	
178 HTPR	18	0834	0836	0840	S20	E38	.703	16985	21.2	6	-F		C	0836	20	.3	
GRP86179	18	0842+4	0846+2	0902D	S27	E17	.582	16983	19.6	20	-F						DJ
HTPR	18	0842	0846	0902	S26	E20	.591	16983	19.9	20	-F		C	0846	10	.1	
ABST	18	0846	0848	1000	S28	E14	.577	16983	19.4	74	-F		C	0848	87	1.1	DJ
GRP86180	18	0846+2	0850+0	0930	S11	E08	.301	16979	19.0	44	-N				120	1.3	EJ
HTPR	18	0846	0850	1000	S15	E08	.361	16979	19.0	74	-N		C	0850	80	.8	E
ISTA	18	0847		0930	S09	E10	.290	16979	19.1	43	1N						E
ABST	18	0848	0850	0851	S11	E01	.269	16979	18.4	3	-N		C	0850	174	1.8	EJ
181 ABST	18	0920	0927	0950	S25	E20	.579	16983	19.9	30	-N		C	0927	131	1.6	DJ
182 CATA	18	0940	0945	1000	S21	E76	.981	16992	24.1	20	?F	2	C	0945	84		
IMP.1 NO : ABST HTPR																	
GRP86183	18	0955+5	1005+5	1029	S23	E23	.582	16983	20.1	34	-F				30	.4	E
HTPR	18	0955	1005	1032	S23	E24	.591	16983	20.2	37	-F	*	C	1005	30	.3	E
CATA	18	1000	1010	1025	S23	E23	.582	16983	20.1	25	-F	*	C	1010	28	.4	
GRP86184	18	1041+4	1046+4	1104	N25	W37	.655	16974	15.7	23	-F						E
HTPR	18	1041	1046	1103	N25	W32	.600	16974	16.0	22	-F		C	1046	30	.3	E
CATA	18	1045	1050	1105	N25	W42	.709	16974	15.3	20	1F	2	C	1050	140	2.0	
185 HTPR	18	1313	1322	1342	S24	E26	.618	16983	20.5	29	-F		C	1322	20	.2	
186 HOLL	18	1325	1325	1349	S10	E03	.257	16979	18.8	24	-F	3	C		50		
GRP86187	18	1415+3	1419+1	1435	S10	E01	.252	16979	18.7	20	-F				40	.4	E
HTPR	18	1415	1419	1435	S10	E03	.257	16979	18.8	20	-F		C	1419	30	.3	E
HOLL	18	1417	1420	1436	S10	E00	.252	16979	18.6	19	-N	3	C		50		
RAMY	18	1418	1420	1435	S10	E01	.252	16979	18.7	17	-F	3	C		41		

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs	Type	Area Measurement Time (UT)	Appar (Disk)	Corr (Sq Deg)	Remarks
GRP86188	18	1445+5	1451+0	1500	S28	E20	.614	16983	20.1	15	-N				30	.4	
HTPR	18	1445	1451	1510	S28	E20	.614	16983	20.1	25	-N		C	1451	20	.2	
HOLL	18	1449	1451	1458	S27	E21	.609	16983	20.2	9	-N	3	C		37		
HUAN	18	1450		1500D	S28	E20	.614	16983	20.1	10D	-F	1	P	1451	30	.4	
189 HOLL	18	1611	1613	1620	S11	W01	.269	16979	18.6	9	-F	3	C		36		
190 HOLL	18	1623	1645	1656	S17	E42	.729	16985	21.8	33	-F	3	C		37		
GRP86191	18	1634>9	1715 1726+1	1754	S11	E04	.277	16979	19.0	80	-F				45	.5	E
HTPR	18	1634	1715	1755	S13	E07	.324	16979	19.2	81	-F		C	1715	20	.2	
HOLL	18	1716	1726	1747	S15	E05	.345	16979	19.1	31	-F	3	C		63		
HTPR	18	1723	1727	1800	S10	E01	.252	16979	18.8	37	-F		C	1727	30	.3	E
HUAN	18	1727E		1744D	S10	W03	.257	16979	18.5	17D	-F	1	P				
192 HOLL	18	1822	1822	1838	S17	E73	.967	16992	24.2	16	-F	3	C				
193 HOLL	18	1854	1908	1912	S28	E19	.607	16983	20.2	18	-F	3	C		24		
194 HOLL	18	1912	1916	1928	S18	E69	.949	16992	24.0	16	-N	3	C				
195 HOLL	18	1950	1956	2019	S22	E20	.545	16983	20.3	29	-F	3	C		25		
196 HOLL	18	1953	1953	2020	S22	E28	.618	16985	20.9	27	-N	3	C		40		
197 HOLL	18	1958	1958	2007	N15	W45	.713	16974	15.5	9	-F	3	C		30		
198 HOLL	18	2002	2003	2010	S17	E71	.958	16992	24.2	8	-F	3	C				
GRP86199	18	2011+0	2023	2031	N15	E34	.574	16987	21.4	20	-F						D
HOLL	18	2011	2023	2045	N15	E33	.560	16987	21.3	34	-F	3	C		21		
HUAN	18	2011		2017	N15	E35	.587	16987	21.5	6	-F	1	C	2014	25	.3	D
200 HOLL	18	2022	2029	2039	S28	E18	.601	16983	20.2	17	-B	3	C		71		D
GRP86201	18	2103>9	2115+4	2205	S10	W02	.254	16979	18.7	62	-N						
HOLL	18	2103	2115	2209	S10	W01	.252	16979	18.8	66	-N	*	C		153		
BIGB	18	2113	2119	2200	S10	W04	.261	16979	18.6	47	-N	*	C	2119	60	.6	
202 HOLL	18	2105	2107	2112	S19	E33	.645	16985	21.4	7	-N	3	C		90		
203 HOLL	18	2105	2112	2113	S22	E19	.537	16983	20.3	8	-N	3	C		148		
204 HOLL	18	2106	2108	2138	N15	E30	.519	16987	21.1	32	-N	3	C		26		
205 HOLL	18	2111	2111	2118	N18	W42	.684	16974	15.7	7	-F	3	C		21		
206 HOLL	18	2132	2138	2153	N19	W44	.710	16974	15.6	21	-F	3	C		34		
207 HOLL	18	2137	2138	2143	S19	E69	.950	16992	24.1	6	-F	3	C				
208 HOLL	18	2139	2139	2150	N14	E32	.543	16987	21.3	11	-F	3	C		27		
209 HOLL	18	2139	2139	2144	S29	E18	.613	16983	20.3	5	-F	3	C		24		
GRP86210	18	2156+1	2159+1	2255	N24	W44	.726	16974	15.6	59	1B				300	4.4	FJ
CULG	18	2156	2159	2307	N28	W45	.751	16974	15.5	71	2B		C	2159	410	6.0	JF
HOLL	18	2157	2200	2243	N21	W43	.705	16974	15.7	46	1N	3	C		201		
211 HOLL	18	2159	2238	2317	S24	E36	.710	16985	21.6	78	-F	3	C		64		
212 HOLL	18	2215	2219	2233	S14	W22	.480	16978	17.3	18	-F	3	C		27		
GRP86213	18	2229>9	2259 2334	2341D	S25	E31	.672	16991	21.3	72	-N						F
CULG	18	2229	2259	0018U	S25	E32	.681	16991	21.3	109D	1N		C	2259	240	3.1	F
HOLL	18	2324	2334	2341	S25	E31	.672	16991	21.3	17	-F	3	C		37		

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs	Type	Area Measurement Time (UT)	Appar (Disk)	Corr (Sq Deg)	Remarks
GRP86214	18	2238+3	2240+5	2258	S29	E15	.596	16983	20.1	20	-F						
HOLL	18	2238	2240	2257	S29	E17	.607	16983	20.2	19	-F	3	C		21		
CULG	18	2241	2245	2258	S30	E13	.599	16983	19.9	17	-N		C	2245	70	.9	
215 CULG	18	2250	2259	2314	S16	W22	.499	16978	17.3	24	-N		C	2259	40	.6	
GRP86216	18	2302+1	2304+1	2310	S29	E15	.596	16983	20.1	8	-F				35	.4	
CULG	18	2302	2305	2311	S30	E13	.599	16983	19.9	9	-N		C	2305	40	.5	
HOLL	18	2303	2304	2309	S29	E17	.607	16983	20.2	6	-F	3	C		29		
217 HOLL	18	2307	2313	2317	S12	W02	.288	16979	18.8	10	-F	3	C		35		
218 CULG	18	2341	2350	0024	S26	E10	.531	16983	19.7	43	-F		C	2350	60	.7	
GRP86219	19	0006+0	0009+2	0024	S12	W22	.462	16978	17.4	18	-F				60	.7	E
PEKG	19	0006	0009	0013D	S13	W22	.471	16978	17.4	7D	-F		C	0008	46	.5	E
CULG	19	0006	0011	0024	S11	W23	.466	16978	17.3	18	-F		C	0011	80	.9	
220 CULG	19	0011	0014	0024	N25	E40	.687	16988	22.0	13	-F		C	0014	30	.3	
221 CULG	19	0044	0047	0058	S18	E55	.855	16992	23.2	14	?F		C	0047	160	3.0	FL
			IMP.1 NO : BIGB PALE														
222 CULG	19	0121	0141U	0222	S12	E00	.287	16979	19.1	61	-F		C	0141	120	1.3	
223 CULG	19	0451	0456	0506	S24	E34	.692	16985	21.8	15	-F		C	0456	40	1.6	
224 CULG	19	0526	0530	0548	S30	E15	.609	16983	20.4	22	-F		C	0530	40	.5	
225 ABST	19	0642	0646	0652	S25	E06	.504	16983	19.7	10	-F		C	0646	131	1.5	EJ
GRP86226	19	0755+0	0755+1	0805	S28	E06	.548	16983	19.8	10	-F				45	.5	
HTPR	19	0755	0756	0805	S29	E05	.560	16983	19.7	10	-F		C	0756	30	.3	
CATA	19	0755	0755	0805	S28	E07	.550	16983	19.9	10	-F	2	C	0755	56	.7	
227 ABST	19	0806	0807	0809D	N10	E25	.428	16987	21.2	3D	-N		P	0807	87	.9	DV
GRP86228	19	0929+3	0932+2	0942	N26	W50	.791	16974	15.6	13	-F						D
ABST	19	0929	0934	0944	N31	W50	.806	16974	15.6	15	-F		C	0934	87	1.1	D
HTPR	19	0932	0932	0940	N22	W51	.791	16974	15.6	8	-F		C	0932	20	.3	
229 HTPR	19	1134	1139	1150	S28	E04	.543	16983	19.8	16	-N		C	1139	60	.7	
230 RAMY	19	1311	1311	1325	S15	W31	.595	16978	17.2	14	-F	3	C		57		
231 HTPR	19	1502	1506	1530	N15	E07	.215	16981	20.2	28	-F		C	1506	20	.2	E
232 HTPR	19	1510	1515	1530	S20	E62	.911	16992	24.3	20	-F		C	1515	30	.7	E
GRP86233	19	1519+7	1525+2	1542	S25	E10	.519	16983	20.4	23	-F				20	.2	
HTPR	19	1519	1525	1550	S26	E12	.542	16983	20.5	31	-F		C	1525	20	.2	
RAMY	19	1526	1527	1533	S24	E08	.496	16983	20.2	7	-F	3	C		22		
GRP86234	19	1529+0	1530+2	1543	N20	W53	.806	16974	15.7	14	-F				40	.7	E
HOLL	19	1513	1532	1543	N20	W53	.806	16974	15.7	30	-N	*	C		51		
HTPR	19	1529	1530	1545	N22	W53	.810	16974	15.7	16	-F	*	C	1530	20	.3	E
RAMY	19	1529	1532	1543	N19	W53	.805	16974	15.7	14	-F	*	C		53		
GRP86235	19	1641+1	1643+5	1659	S15	W31	.595	16978	17.4	18	-F				45	.6	E
HTPR	19	1641	1643	1656	S15	W31	.595	16978	17.4	15	-F		C	1643	40	.4	E
HOLL	19	1642	1648	1702	S16	W32	.613	16978	17.3	20	-F	3	C		47		
GRP86236	19	1649+5	1656+0	1707	S29	E05	.560	16983	20.1	18	-F				50	.6	E
HOLL	19	1649	1656	1707	S29	E05	.560	16983	20.1	18	-F	*	C		58		
HUAN	19	1654		1657	S29	E05	.560	16983	20.1	3	-F	*	C				E
HTPR	19	1654	1656	1710	S28	E01	.540	16983	19.8	16	-F	*	C	1656	50	.5	E

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GRP86237	19	1649+8	1651 1702+6	1720	S25	E18	.566	16991	21.1	31	-F						
HTPR	19	1649	1651	1700	S24	E13	.520	16991	20.7	11	-F	*	C	1651	20	.2	
HOLL	19	1650	1702	1740D	S26	E18	.578	16991	21.1	50D	-F	3	C		90		
HUAN	19	1657		1704	S25	E18	.566	16991	21.1	7	-F	1	C				
HTPR	19	1658	1708	1720	S25	E16	.552	16991	20.9	22	-F		C	1708	20	.2	
238 HTPR	19	1650	1652	1720	S20	E16	.489	16985	20.9	30	-F		C	1652	30	.3	E
GRP86239	19	1706+4	1711+5	1801	S13	W13	.373	16979	18.7	55	-N				120	1.3	E
HTPR	19	1706	1712	1745	S13	W14	.383	16979	18.7	39	-N		C	1712	100	1.0	E
HOLL	19	1706	1711	1740D	S14	W13	.386	16979	18.7	34D	1B	3	C		216		
HUAN	19	1709		1801D	S14	W13	.386	16979	18.7	52D	-F	1	P				E
BIGB	19	1710	1716	1817	S12	W13	.360	16979	18.7	67	-N	2	C	1716	120	1.3	
240 BIGB	19	1912E	1915U	1937	S22	E05	.456	16983	20.2	25D	-N	2	P	1915	50	.5	
241 HOLL	19	1925E	1929U	1950	S19	E22	.531	16985	21.5	25D	-F	3	C		23		
GRP86242	19	2218	2219 2234	2247	S26	E03	.512	16983	20.2	29	-F						FJ
CULG	19	2218	2219	2247	S23	E05	.471	16983	20.3	29	-F		C	2219	70	.8	JTF
CULG	19	2233	2234	2243	S30	E01	.569	16983	20.0	10	-F		C	2234	40	.5	
243 CULG	19	2316	2329	2341	S25	W28	.646	16980	17.9	25	-F		C	2329	30	.4	TK
GRP86244	19	2318+2	2321+1	0007	S24	E05	.486	16983	20.3	49	-B						FJ
CULG	19	2318	2322	0014	S25	E05	.501	16983	20.3	56	1B		C	2322	340	3.9	JTF
BIGB	19	2320	2321	2359	S24	E05	.486	16983	20.3	39	-N	2	C	2321	50	.5	
245 CULG	20	0005	0015	0021	S09	W46	.742	16978	16.6	16	-F		C	0015	40	.6	
GRP86246	20	0028+2	0031+1	0040	S24	E04	.485	16983	20.3	12	-B				120	1.4	FJ
HOLL	20	0028	0031	0040	S24	E05	.488	16983	20.4	12	-B	3	C		121		
CULG	20	0029	0032	0040	S23	E04	.470	16983	20.3	11	-B		C	0032	160	1.8	JTF
BIGB	20	0030	0031	0049	S24	E04	.485	16983	20.3	19	-B	3	C	0031	60	.6	
247 CULG	20	0031	0040	0114	S30	E11	.593	16991	20.8	43	-F		P	0040	160	1.9	
248 CULG	20	0043	0048U	0050	N26	W62	.889	16974	15.4	7	-F		C	0048	30	.6	
249 CULG	20	0121	0124	0137	S15	E53	.830	16992	24.0	16	-N		C	0124	50	.9	
250 CULG	20	0225	0236	0250	S25	E29	.656	16985	22.3	25	-F		C	0236	60	.8	T
251 CULG	20	0242	0256	0327	S19	E12	.447	16985	21.0	45	-F		C	0256	80	.9	
252 CULG	20	0247	0259	0311	S25	W28	.647	16980	18.0	24	-N		C	0259	110	1.4	T
253 CULG	20	0305	0321	0352	S24	E53	.858	16992	24.1	47	-F		C	0321	60	1.1	
254 CULG	20	0341	0344	0358	S22	E02	.452	16983	20.3	17	-N		C	0344	30	.3	
255 CULG	20	0451	0455	0501	S07	W47	.747	16978	16.7	10	-N		C	0455	40	.6	T
256 CULG	20	0502	0505	0512	S25	W29	.656	16980	18.0	10	-N		C	0505	80	1.0	T
257 CULG	20	0511	0521	0536	S11	E70	.948	17000	25.5	25	-F		C	0521	70		
258 CULG	20	0517	0523	0532	S23	E17	.535	16985	21.5	15	-F		C	0523	90	1.1	F
259 CULG	20	0526	0532	0552	S22	E05	.457	16983	20.6	26	-F		C	0532	20	.2	
260 CULG	20	0544	0554	0607	S19	E11	.440	16985	21.1	23	-N		C	0554	100	1.2	
GRP86261	20	0606+4	0610+5	0735	S38	E12	.697	16986	21.2	89	1N				360	5.0	FGIS
CULG	20	0606	0615	0630D	S40	E11	.718	16986	21.1	24D	1B		P	0615	360	4.0	SUFI
CATA	20	0610	0610	0735	S38	E16	.711	16986	21.5	85	2F	1	C	0610	422	6.2	
YUNN	20	0620E	0620	0632D	S36	E12	.673	16986	21.2	12D	-B		P		96	1.3	G

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs Type	Area Measurement Time (UT)	Appar (Disk)	Corr (Sq Deg)	Remarks
GRP86262	20	0817+3	0819+2 0830	0903	S25	00	.497	16983	20.3	46	-F					K
YUNN	20	0817	0819	0822D	S26	E02	.513	16983	20.5	5D	1N	C		257	3.1	
ISTA	20	0817		0850	S25	E04	.500	16983	20.6	33	-F					K
ATHN	20	0818E	0821	0834	S20	W10	.449	16983	19.6	16D	-N	3 V	0821	32	.4	
CATA	20	0820	0830	0830D	S28	W03	.543	16983	20.1	10D	1F	1 P	0830	169	2.1	
KANZ	20	0830E	0856	0856	S27	E02	.528	16983	20.5	26D	-F	2				
CATA	20	0850E	0850	0940D	S29	W03	.558	16983	20.1	50D	-F	1 P	0850	140	1.7	
KHAR	20	0906E	0906	0914D	S26	E03	.514	16983	20.6	8D	-F	V	0906	40	.5	BD
KHAR	20	0908E	0908	0923D	S22	W02	.452	16983	20.2	15D	-F	V	0908			D
263 KHAR	20	0950E	0950	0952D	S19	E50	.816	16992	24.2	2D	-F	V	0950			D
264 KHAR	20	1007E		1015D	S18	E09	.414	16985	21.1	8D	-F	P	1007			D
265 KHAR	20	1007E	1007	1013D	N06	W21	.357	16995	18.8	6D	-F	P	1007			D
266 KHAR	20	1020E	1022	1027D	S09	W48	.764	16978	16.8	7D	-N	V	1022	60	1.0	EH
267 KHAR	20	1027E	1028	1042D	S26	W32	.691	16980	18.0	15D	-F	V	1028			EH
268 KHAR	20	1032E	1033	1038D	S09	E78	.981	17000	26.3	6D	-F	V	1033	30		D
269 KHAR	20	1036E	1036	1042D	S12	W22	.463	16979	18.8	6D	-F	V	1036			E
270 RAMY	20	1042	1046	1054	S19	E47	.788	16992	24.0	12	-F	3 C		34		
271 RAMY	20	1059	1059	1109	S27	W31	.691	16980	18.1	10	-F	3 C		25		
GRP86272	20	1132+0	1133+1	1147	S26	E06	.520	16983	20.9	15	-F					E
KHAR	20	1132E	1133	1154D	S27	E07	.537	16983	21.0	22D	-N	V	1132			E
RAMY	20	1132	1134	1139	S26	E05	.517	16983	20.9	7	-F	3 C		38		
GRP86273	20	1135+0	1136+2	1149	S18	E09	.414	16985	21.2	14	-N			60	.7	E
KHAR	20	1135E	1136	1151D	S18	E09	.414	16985	21.2	16D	-N	P	1135	50	.5	E
RAMY	20	1135	1138	1147	S18	E10	.420	16985	21.2	12	-N	3 C		71		
274 KHAR	20	1145E		1154D	N11	W47	.730		17.0	9D	-F	V	1148			E
GRP86275	20	1218+2	1221+3	1229D	S27	W06	.534	16983	20.1	11	-B			160	1.9	D
RAMY	20	1218	1221	1322	S30	W06	.577	16983	20.1	64	1B	3 C		224		D
ATHN	20	1220	1224	1229	S24	W06	.490	16983	20.1	9	-B	3 V	1224	111	1.4	
ATHN	20	1220	1224	1229	S24	W06	.490	16983	20.1	9	-B	3 C		111		D
276 HOLL	20	1417	1420	1429	N16	W08	.237	16981	20.0	12	-F	4 C		43		
GRP86277	20	1434+6	1436+0	1446	S17	W42	.730	16978	17.5	12	-F			35	.5	
HOLL	20	1434	1436	1449	S17	W42	.730	16978	17.5	15	-N	4 C		40		
RAMY	20	1436	1436	1446	S16	W41	.714	16978	17.5	10	-F	3 C		30		
HUAN	20	1440		1446	S17	W42	.730	16978	17.5	6	-F	1 C				
278 HOLL	20	1655	1656	1710	N16	W10	.257	16981	20.0	15	-N	3 C		59		
279 HOLL	20	1723	1725	1734	S24	W03	.484	16983	20.5	11	-N	3 C		115		
GRP86280	20	1759+5	1820+1	1900	S24	W06	.490	16983	20.3	61	-F			50	.6	
HOLL	20	1759	1820	1902	S24	W03	.484	16983	20.5	63	-N	3 C		73		
HUAN	20	1804		1858	S23	W05	.473	16983	20.4	54	-F	1 C				
HUAN	20	1819	1821	1833	S26	W12	.543	16983	19.9	14	-F	1 C	1821	30	.4	
281 HOLL	20	1807	1812	1837	N16	W10	.257	16981	20.0	30	-F	3 C		58		
GRP86282	20	1919+6	1925+3 1936	2030	S19	W45	.769	16978	17.4	71	1B					DU
HOLL	20	1919	1936	2032	S19	W45	.769	16978	17.4	73	2B	3 C		459		D
HOLL	20	1919	1925	2032	S19	W45	.769	16978	17.4	73	1B	3 C		403		D
BIGB	20	1924	1927	2030	S20	W40	.725	16978	17.8	66	1B	3 C	1927	350	4.7	
HUAN	20	1925	1928	1948	S18	W45	.765	16978	17.4	23	1N	2 C	1928	160	2.5	U
283 HOLL	20	1924	1934	2001	S22	E10	.477	16985	21.6	37	-F	3 C		113		

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs	Type	Area Measurement Time (UT)	Appar (Disk)	Corr (Sq Deg)	Remarks
284 CULG	20	2210	2219	2246	N14	E05	.181	16987	21.3	36	-F		C	2219	80	.8	
285 CULG	20	2235	2238	2244	S28	W17	.597	16983	19.7	9	-N		C	2238	100	1.2	H
GRP86286	20	2252+0	2254+2	2324	S12	W57	.858	16978	16.7	32	1B				140	2.7	H
CULG	20	2252	2256	2324	S10	W57	.854	16978	16.7	32	1B		C	2256	140	2.8	H
BIGB	20	2252	2256	2346	S12	W59	.875	16978	16.5	54	1B	3	C	2256	180	3.6	
HOLL	20	2252	2254	2310	S14	W56	.854	16978	16.8	18	-N	3	C		93		
287 CULG	20	2328	2334	2343	S23	W07	.479	16983	20.5	15	-F		C	2334	80	.9	
288 CULG	20	2347	2351	2356	S28	W17	.597	16983	19.7	9	-F		C	2351	50	.6	H
289 CULG	21	0002	0005	0019	S22	E40	.737	16992	24.0	17	-F		C	0005	60	.9	D
290 CULG	21	0018	0020	0031	S27	W17	.586	16983	19.7	13	-N		C	0020	70	.8	T
GRP86291	21	0031+0	0034+1	0050	S19	E02	.406	16985	21.2	19	-B				70	.8	
BIGB	21	0031	0034	0049	S19	E03	.408	16985	21.2	18	-B	3	C	0034	50	.5	
CULG	21	0031	0035	0051	S19	E01	.405	16985	21.1	20	-B		C	0035	100	1.1	
292 CULG	21	0042	0101U	0130U	S32	E48	.854		24.6	48D	?F		C	0101	120	2.2	F
			IMP.1 NO : BIGB MITK														
293 CULG	21	0131	0139	0153	S28	W17	.598	16983	19.8	22	-N		C	0139	40	.5	HT
294 CULG	21	0152	0159	0213	S10	W61	.887	16978	16.5	21	-F		C	0159	90	1.8	T
	21	0234	0244	NO FLARE PATROL													
GRP86295	21	0244E	0318	0418	S27	E50	.847	16992	24.9	94	1N						
CULG	21	0244U	0318U	0544	S29	E50	.855	16992	24.9	180D	2N	*	C	0318	340	5.8	F
MITK	21	0307E		0418	S26	E50	.843	16992	24.9	71D	1N	*	C	0307	110	2.1	E
TACH	21	0341E		0353	S27	E52	.861	16992	25.1	12D	1B	*	C	0344	115	2.5	D
GRP86296	21	0247	0307	0309D	S13	W60	.885	16978	16.6	22	?B						DHKZ
CULG	21	0247	0307	0356	S12	W60	.883	16978	16.6	69	?B		C	0307	400	8.8	HKZ
			IMP.2 IMP.S														
MITK	21	0307E		0309	S15	W60	.888	16978	16.6	2D	-N		C	0307			DH
	21	0248	0306	NO FLARE PATROL													
297 CULG	21	0324	0338	0347	S19	E59	.889	17000	25.6	23	-F		C	0338	30	.7	
298 CULG	21	0432	0444	0550	S10	W54	.827	16978	17.1	78	?F		C	0444	120	2.2	FT
			IMP.1 NO : TACH MITK														
299 CULG	21	0440	0445	0504	S19	W01	.405	16985	21.1	24	-N		C	0445	60	.7	
300 CULG	21	0511	0518	0543	N03	W05	.093	16984	20.8	32	-N		C	0518	80	.8	
GRP86301	21	0705+1	0711	0719	N26	E06	.373	16988	21.7	14	-F						J
ISTA	21	0705		0717	N28	E03	.396	16988	21.5	12	-F						D
ABST	21	0706	0711	0720	N25	E10	.379	16988	22.0	14	-N		C	0711	131	1.4	EJ
GRP86302	21	0707	0709+4	0740	S23	E29	.639	16992	23.5	33	-F						EJ
ABST	21	0707	0709	0720	S25	E32	.684	16992	23.7	13	-F		C	0709	87	1.1	D
ABST	21	0711	0713	0740	S22	E26	.602	16992	23.2	29	-F	*	C	0713	131	1.6	EJ
GRP86303	21	0710+9	0723	0734	S18	E02	.390	16985	21.4	24	-F						
ISTA	21	0710		0728	S17	W02	.374	16985	21.1	18	-N						E
ABST	21	0719	0723	0740	S19	E07	.420	16985	21.8	21	-F		C	0723	87	.9	D
304 ISTA	21	0718		0729	S31	W16	.629	16983	20.1	11	-F						D
305 ABST	21	0916E	0918	0932	S30	W20	.640	16983	19.9	16D	1N		P	0918	175	2.1	FJ
306 ABST	21	0925	0927	0950	S19	W04	.410	16985	21.1	25	-F		C	0927	105	1.2	EJ
307 ABST	21	0926	0927	0950	N23	W19	.435	16981	20.0	24	-F		C	0927	114	1.3	DV

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	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs Type		Area Measurement Time (UT)	Appar (Disk)	Corr (Sq Deg)	Remarks
308	ABST	21	0949	0950	1003	N04	W06	.105	16984	21.0	14	-N		C	0950	96	.9	DV
309	CATA	21	1045	1045	1055	S13	W64	.914	16978	16.6	10	1F	2	C	1045	84		
GRP86310		21	1410+3	1415+0	1424	S23	W19	.552	16983	20.2	14	-F				40	.5	E
	HUAN	21	1410	1415	1419	S18	W18	.484	16983	20.2	9	-F	1	C	1415	40	.5	E
	RAMY	21	1413	1415	1428	S28	W20	.617	16983	20.1	15	-N	3	C		37		
311	RAMY	21	1436	1437	1457	N04	W08	.140	16984	21.0	21	-F	3	C		31		
GRP86312		21	1515+2	1517+3	1528	S15	W64	.917	16978	16.8	13	-N				80		
	BIGB	21	1515	1517	1528	S13	W65	.920	16978	16.8	13	1B	2	C	1517	90		
	RAMY	21	1516	1517	1536	S15	W64	.917	16978	16.8	20	-N	3	C		77		
	HUAN	21	1516		1520D	S16	W64	.918	16978	16.8	4D	-F	1	P	1518	40		
	HOLL	21	1517	1520	1526	S16	W64	.918	16978	16.8	9	1N	3	C		182		
GRP86313		21	1543+0	1544+0	1548	S07	E43	.701	16999	24.9	5	-F				30	.4	
	HOLL	21	1543	1544	1548	S06	E41	.674	16999	24.7	5	-F	3	C		30		
	RAMY	21	1543	1544	1547	S08	E45	.728	16999	25.0	4	-F	3	C		25		
314	HOLL	21	1547	1548	1603	S23	E41	.752	16992	24.7	16	-F	3	C		20		
315	RAMY	21	1607	1612	1644D	N04	W09	.157	16984	21.0	37D	-F	3	C		69		
316	BIGB	21	1717	1723	1749	N21	E90	1.000	17002	28.5	32	?F	3	C	1723	50		
				IMP.1 NO : HOLL RAMY														
317	BIGB	21	1841	1852	1953	S17	E33	.633	16992	24.3	72	-N	3	C	1852	60	.7	
318	BIGB	21	1851	1912	2040	S17	W04	.378	16985	21.5	109	1B	3	C	1912	230	2.4	
GRP86319		21	2200+0	2201+0	2211	S26	W27	.649	16983	19.9	11	-N				50	.6	
	CULG	21	2200	2201	2212	S26	W29	.666	16983	19.7	12	-N		C	2201	60	.8	
	BIGB	21	2200	2201	2209	S27	W25	.643	16983	20.0	9	-N	3	C	2201	50	.6	
320	CULG	21	2209	2216	2236	S22	E27	.611	16992	23.9	27	-F		C	2216	80	1.0	
321	CULG	21	2213	2216	2218	S12	E25	.501	16992	23.8	5	-F		C	2216	40	.5	
322	CULG	21	2238	2239U	2239D	S14	W14	.398	16985	20.9	1D	-F		C	2239	20	.2	
GRP86323		21	2333+1	2334+5 2345+5	0008	S25	W24	.614	16983	20.2	35	-N				90	1.1	EL
	CULG	21	2333E	2334	0035U	S26	W28	.657	16983	19.9	62D	1N		P	2334	160	2.1	BT
	BIGB	21	2334	2336	2359	S27	W25	.643	16983	20.1	25	-N	3	C	2336	50	.6	
	BIGB	21	2338	2339	0002	S23	W21	.568	16983	20.4	24	-B	3	C	2339	60	.7	
	VORO	21	2341E		2345	S24	W20	.571	16983	20.5	4D	-N		C	2341	125	1.6	EL
	PEKG	21	2343	2345	2348	S23	W22	.576	16983	20.3	5	-N		C	2345	55	.7	E
	PEKG	21	2346	2350	2353	S28	W26	.660	16983	20.0	7	-N		C	2350	42	.6	E
	CULG	21	2356	2404	0029	S25	W24	.614	16983	20.2	33	-F		C	2404	80	1.0	T
GRP86324		21	2357+3	2359+2	0010	S09	E41	.684	16999	25.1	13	-N				50	.7	
	PEKG	22	0000	0001	0010	S07	E41	.677	16999	25.1	10	-N		C	0001	25	.3	E
	CULG	21	2357	2400	0023	S10	E40	.676	16999	25.0	26	-N		C	2400	50	.7	
	VORO	21	2358	2359	0004	S09	E41	.684	16999	25.1	6	-F		C	2359	72	1.0	D
GRP86325		22	0024+2	0029+2	0041	S22	W60	.903	16980	17.5	17	-N						D
	PEKG	22	0024	0029	0038	S23	W58	.892	16980	17.7	14	-N		C	0027	25	.6	D
	CULG	22	0026	0031	0044	S22	W62	.916	16980	17.4	18	1N		C	0031	80	2.0	
326	CULG	22	0057	0100	0116	S28	W22	.632	16983	20.4	19	-F		C	0100	60	.8	T
GRP86327		22	0109+6	0119+1	0135	S18	W17	.476	16985	20.8	26	-N				170	1.9	E
	CULG	22	0109	0120	0139	S18	W23	.534	16985	20.3	30	-N		C	0120	140	1.5	
	VORO	22	0115	0119	0130	S18	W12	.436	16985	21.2	15	1N		C	0119	206	2.3	E
328	VORO	22	0152E		0204D	S23	E37	.716	16992	24.9	12D	?F		P	0152	179	2.6	CE
				IMP.1 NO : CULG MITK														
329	CULG	22	0214	0220	0229	S12	W75	.972	16978	16.5	15	-F		C	0220	50		T

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp		Obs Type	Area Time (UT)	Area Appar (Disk)	Area Corr (Sq Deg)	Remarks
330 CULG	22	0227	0403	0640D	N26	W72	.949	16975	16.7	253D	?F		C	0403	220		SUF
			IMP.2 NO : MITK TACH														
GRP86331	22	0300+6	0308+1	0325	S24	W23	.597	16983	20.4	25	-N						EKL
CULG	22	0300	0309	0345	S23	W25	.604	16983	20.2	45	1N		C	0309	380	4.7	FKL
MITK	22	0303E	0309	0325D	S24	W23	.597	16983	20.4	22D	-N		C	0309			E
PEKG	22	0306	0308	0320	S24	W23	.597	16983	20.4	14	-N		P	0308	126	1.6	E
332 PEKG	22	0340	0345	0355	S24	W59	.901	16980	17.7	15	-N		P	0345	34	.8	D
GRP86333	22	0345+7	0345 0411+1	0439	S24	W24	.605	16983	20.4	54	-N						EK
PEKG	22	0345E	0345	0355D	S27	W29	.676	16983	20.0	10D	-N	*	P	0345	118	1.6	E
PEKG	22	0345E	0345	0347	S23	W23	.586	16983	20.4	2D	-N	*	P	0345	59	.7	E
CULG	22	0352	0405	0442	S24	W24	.605	16983	20.4	50	-F	*	C	0405	100	1.3	
PEKG	22	0355	0411	0436	S23	W23	.586	16983	20.4	41	-N	*	P	0411	101	1.3	F
TACH	22	0358E	0412	0433D	S22	W23	.575	16983	20.4	35D	1B	*	C	0412	230	3.0	EK
GRP86334	22	0402+4	0406+6	0431	S20	E26	.584	16992	24.1	29	-N				100	1.2	EHK
CULG	22	0402	0406	0450	S20	E23	.555	16992	23.9	48	-N		C	0406	120	1.4	FKH
TACH	22	0403E	0412	0431	S21	E26	.593	16992	24.1	28D	-B		C	0412	106	1.4	EK
PEKG	22	0406	0411	0422	S20	E26	.584	16992	24.1	16	-N		P	0411	67	.9	E
GRP86335	22	0519+9	0529+1 0538	0544	S20	W15	.485	16985	21.1	25	-F				110	1.2	J
ABST	22	0519	0529	0544	S16	W20	.482	16985	20.7	25	-F		C	0529	131	1.5	FJ
CULG	22	0523	0538U	0609	S20	W15	.485	16985	21.1	46	-F		C	0538	80	.9	
PEKG	22	0528	0530	0532	S20	W13	.470	16985	21.3	4	-N		P	0528	97	1.1	E
336 CULG	22	0535	0541	0554	S22	E25	.594	16992	24.1	19	-F		C	0541	60	.8	
337 ABST	22	0556	0559	0605	S20	W38	.706	16979	19.4	9	-F		C	0559	131	1.8	EJ
338 CULG	22	0610	0616	0618D	S23	W29	.640	16983	20.1	8D	-F		C	0616	30	.4	
339 HTPR	22	0750	0752	0807	S20	W15	.485	16985	21.2	17	-F		C	0752	20	.2	
340 HTPR	22	0814	0817	0823	S20	W15	.485	16985	21.2	9	-F		C	0817	20	.2	
GRP86341	22	0919>9	0927 1001+2	1051D	S26	W33	.701	16983	19.9	92	-F						EJ
HTPR	22	0919	0927	1013	S25	W31	.675	16983	20.1	54	-F		C	0927	20	.2	
ABST	22	0949	1001	1004D	S18	W40	.715	16983	19.4	15D	-F		P	1001	131	1.8	EJ
HTPR	22	0953	1003	1051	S27	W30	.684	16983	20.2	58	-F		C	1003	30	.3	E
KHAR	22	1012E	1012	1124D	S27	W33	.709	16983	19.9	72D	1N		P	1035	280	4.0	E
342 KHAR	22	1034E	1035	1047D	S15	W37	.666	16979	19.7	13D	-F		P	1035	40	.6	D
343 KHAR	22	1037E	1042	1055D	S14	W19	.450	16985	21.0	18D	-F		P	1038	40	.5	D
344 KHAR	22	1058E	1101	1117D	S25	W60	.910	16980	18.0	19D	-F		P	1103	90	2.0	E
GRP86345	22	1235	1240 1257	1326	S24	W28	.640	16983	20.4	51	-F						E
HTPR	22	1235	1240	1300	S23	W25	.604	16983	20.6	25	-F		C	1240	30	.3	
HTPR	22	1239	1257	1326	S25	W32	.684	16983	20.1	47	-F		C	1257	40	.4	E
GRP86346	22	1404+2	1407+2	1420	S19	W17	.488	16985	21.3	16	-N				40	.5	E
HTPR	22	1404	1409	1420	S20	W18	.509	16985	21.2	16	-N		C	1409	30	.3	E
HOLL	22	1404	1407	1420	S19	W17	.488	16985	21.3	16	-N	3	C		37		
RAMY	22	1406	1407	1418	S18	W17	.476	16985	21.3	12	-F	3	C		35		
347 HOLL	22	1524	1525	1543	S28	W31	.701	16983	20.3	19	-F	3	C		25		
348 HTPR	22	1531	1540	1559	S24	E28	.640	16992	24.7	28	-F		C	1540	30	.3	
349 BIGB	22	1545	1549	1557	S13	W80	.989	16978	16.7	12	-N	2	C	1549	40		
350 HOLL	22	1547	1610	1611	S27	W63	.931	16980	17.9	24	-F	3	C		16		
351 HTPR	22	1605	1608	1612	S22	E20	.549	16992	24.2	7	-F		C	1608	30	.3	E

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs	Type	Area Measurement Time (UT)	Appar (Disk)	Corr (Sq Deg)	Remarks
GRP86352	22	1614+7	1623+1	1650	N04	W24	.406	16984	20.9	36	-N				140	1.5	E
HTPR	22	1614	1624	1650	N05	W24	.405	16984	20.9	36	-N		C	1624	120	1.3	E
HOLL	22	1618	1623	1648	N03	W23	.391	16984	21.0	30	-N	3	C		186		
BIGB	22	1620	1623	1657	N05	W24	.405	16984	20.9	37	-N	2	C	1623	120	1.4	
HUAN	22	1621		1626D	N04	W24	.406	16984	20.9	5D	-F	1	P				E
353 HTPR	22	1806	1811	1814	N19	W34	.588	16981	20.2	8	-F		C	1811	20	.2	E
354 HOLL	22	1841	1843	1854	S10	E22	.447	16992	24.4	13	-F	3	C		80		
355 HUAN	22	1914	1917	1918	S29	W33	.725	16983	20.3	4	-F	1	C	1917	20	.3	D
356 HOLL	22	2159	2200	2232	S19	E19	.506	16992	24.3	33	-F	3	C		43		
357 CULG	22	2238	2304	0025U	S25	W40	.756	16983	19.9	107D	?N		C	2304	220	3.3	F
			IMP.1 NO : HOLL PALE														
358 PEKG	23	0012	0016	0031	S17	W25	.546	16985	21.1	19	-F		C	0016	42	.5	D
GRP86359	23	0046	0100 0111+1	0305	S19	E17	.489	16992	24.3	139	3B						FIKU
PEKG	23	0046	0100	0255	S18	E16	.468	16992	24.2	129	3B		C	0100	1429	16.7	FIKU
BIGB	23	0052E	0111U	0233D	S20	E18	.510	16992	24.4	101D	2B	1	P	0111	910	9.0	
CULG	23	0056E	0112	0314U	S18	E15	.460	16992	24.2	138D	3B		C	0112	2100	23.0	CUZ
PEKG	23	0105E	0105	0105D	S18	E17	.477	16992	24.3		3B		C	0105	1093	12.8	FIKU
PEKG	23	0111E	0111	0111D	S18	E16	.468	16992	24.2		2B		C	0111	1051	12.3	FIKU
YUNN	23	0124E		0200D	S20	E18	.510	16992	24.4	36D	4N		P	0125	2329	27.6	BU
PEKG	23	0135E	0135	0135D	S20	E17	.502	16992	24.3		3B		C	0135	1934	22.6	FIKU
MITK	23	0139E	0142	0224D	S18	E18	.486	16992	24.4	45D	3N		C	0142	1260	14.9	FU
360 BIGB	23	0145	0148	0158D	S13	E90	1.000	17008	29.8	13D	?B	1	P	0148	80		
			IMP.1 NO : CULG YUNN MITK														
361 CULG	23	0228	0243	0311	S28	W65	.944	16980	18.2	43	?F		C	0243	130		
			IMP.1 NO : PALE														
362 PEKG	23	0242	0244	0248	S18	W26	.566	16985	21.2	6	-F		P	0242	76	.9	EF
GRP86363	23	0319+3	0325+0	0332	S27	W44	.801	16983	19.8	13	-N				80	1.3	
CULG	23	0319	0325	0332	S28	W45	.814	16983	19.8	13	-N		C	0325	80	1.3	
YUNN	23	0322	0325	0325D	S27	W43	.793	16983	19.9	3D	-N		P		80	1.3	
364 CULG	23	0400	0411	0426	S12	W65	.919	16979	18.3	26	1F		C	0411	100		
365 CULG	23	0457	0459	0507	S26	W70	.964	16980	18.0	10	-F		C	0459	70		
366 CULG	23	0509	0511	0515	S26	W45	.804	16983	19.8	6	-N		C	0511	30	.5	T
367 CULG	23	0523	0525	0531	S26	W70	.964	16980	18.0	8	-N		C	0525	30		
368 ABST	23	0557	0558	0602D	S04	W36	.603		20.5	5D	-N		P	0558	87	1.1	DJ
369 CULG	23	0557	0600	0606	S32	W25	.695	16991	21.4	9	-N		C	0600	30	.4	
370 ABST	23	0557	0559	0614	N28	W40	.699		20.2	17	-N		C	0559	131	1.8	EJ
371 CULG	23	0558	0600	0606	S26	W71	.967	16980	17.9	8	-N		C	0600	30		
372 PEKG	23	0650	0652	0700	S29	W71	.971	16980	18.0	10	-N		C	0652	38		D
373 ABST	23	0655	0658	0713	S04	W36	.603		20.6	18	-F		C	0658	87	1.1	DJ
374 ABST	23	0656	0700	0715	S14	E05	.337	16992	23.7	19	*-F		C	0700	131	1.4	EJ
GRP86375	23	0700+6	0707+1	0714	S24	E16	.544	16992	24.5	14	-F						DJ
HTPR	23	0700	0707	0715	S23	E18	.546	16992	24.6	15	-F		C	0707	20	.2	
ABST	23	0706	0708	0713	S26	E14	.557	16992	24.3	7	-F		C	0708	87	1.1	DJ
376 HTPR	23	0721	0722	0724	S12	E04	.301	16992	23.6	3	-F		C	0722	20	.2	
377 HTPR	23	0759	0801	0810	N25	W21	.475	16988	21.8	11	-F		C	0801	10	.1	

H - ALPHA SOLAR FLARES

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs	Type	Area Measurement Time (UT)	Appar (Disk)	Corr (Sq Deg)	Remarks
GRP86378	23	0811+1	0811+5	0923	S27	W71	.968	16980	18.0	72	-N				45		
WEND	23	0811E		0815D	S27	W71	.968	16980	18.0	4D	-F		C	0813	38		
KHAR	23	0811E	0811	0825D	S26	W72	.971	16980	17.9	14D	-N		P	0811	50		
KANZ	23	0812	0816	0923	S28	W69	.962	16980	18.2	71	-N	1					
GRP86379	23	0959+6	1003 1010	1019	S24	W19	.566	16985	22.0	20	-F						
HTPR	23	0959	1003	1012	S25	W22	.600	16985	21.8	13	-F		C	1003	50	.6	
CATA	23	1005	1010	1025	S24	W17	.551	16985	22.1	20	-F	2	C	1010	56	.7	
GRP86380	23	1006	1010+0	1035	S22	E17	.526	16992	24.7	29	-N				140	1.6	E
HTPR	23	1006	1010	1035	S22	E18	.534	16992	24.8	29	-N		C	1010	120	1.3	E
KHAR	23	1010E	1010	1030D	S23	E16	.531	16992	24.6	20D	-N		P	1010	160	1.9	E
381 KHAR	23	1102E	1105	1118D	S27	W46	.817	16983	20.0	16D	-F		P	1105	30	.6	D
GRP86382	23	1110+3	1110+6	1125	N19	E64	.897	17002	28.3	15	-F				30	.7	
CATA	23	1110E	1110	1115D	N19	E66	.911	17002	28.4	5D	-F	1	P	1110	28		
HTPR	23	1113	1116	1125	N20	E63	.890	17002	28.2	12	-F		C	1116	30	.6	
383 HTPR	23	1112	1114	1123	S17	E11	.416	16992	24.3	11	-F		C	1114	20	.2	E
384 HTPR	23	1253	1254	1258	S18	E13	.444	16992	24.5	5	-F		C	1254	20	.2	E
385 HOLL	23	1353	1416	1426	S15	W33	.620	16985	21.1	33	-F	3	C		26		
GRP86386	23	1403>9	1424 1445	1452	S21	E07	.453	16992	24.1	49	-F						EI
HOLL	23	1403	1424	1453	S19	E10	.438	16992	24.3	50	-N	3	C		87		
HTPR	23	1424	1445	1450	S23	E04	.474	16992	23.9	26	-F		C	1445	50	.5	EI
387 HTPR	23	1410	1416	1420	S12	E05	.305	16992	24.0	10	-F		C	1416	50	.5	E
GRP86388	23	1447+3	1454+1 1509	1516	S27	W71	.968	16980	18.3	29	-N				40		D
KHAR	23	1447E	1452	1452D	S26	W73	.975	16980	18.1	5D	-F		P	1452	40		D
HTPR	23	1450	1455	1504	S27	W70	.965	16980	18.4	14	-N		C	1455	40	.6	
KANZ	23	1450E	1454	1501D	S30	W76	.986	16980	17.9	11D	-B	1					
HOLL	23	1502	1509	1528	S27	W69	.961	16980	18.5	26	-N	3	C				
GRP86389	23	1502+1	1503+6	1525	S35	W49	.875		20.0	23	-F				30	.6	D
HTPR	23	1502	1509	1530	S35	W51	.886		19.8	28	-F		C	1509	30	.3	
WEND	23	1502		1520	S36	W49	.879		20.0	18	-N		V		104	2.0	D
HOLL	23	1503	1503	1520D	S34	W46	.851		20.2	17D	-F	3	C		29		
GRP86390	23	1534>9	1554 1603	1625	S26	W70	.964	16980	18.4	51	-F						
HOLL	23	1534	1554	1630	S27	W69	.961	16980	18.5	56	-N	*	C		32		
HTPR	23	1549	1603	1620	S25	W72	.970	16980	18.3	31	-F	*	C	1603	20		
391 HTPR	23	1539	1543	1552	S12	E01	.294	16992	23.7	13	-F		C	1543	10	.1	
392 HTPR	23	1557	1603	1611	S24	W45	.794	16983	20.3	14	-F		C	1603	20	.3	
393 HTPR	23	1608	1614	1625	S23	E15	.525	16992	24.8	17	-F		C	1614	10	.1	
GRP86394	23	1613>9	1624+1 1637+3	1657	S25	W43	.782	16983	20.5	44	-N						E
HTPR	23	1613	1625	1710	S24	W43	.777	16983	20.5	57	-N		C	1625	60	.8	E
HOLL	23	1620	1624	1700	S24	W43	.777	16983	20.5	40	-N	3	C		94		
RAMY	23	1624	1637	1654	S25	W41	.765	16983	20.6	30	-N	3	C		35		
WEND	23	1626E		1654	S24	W41	.759	16983	20.6	28D	1N		V		250	3.7	
HTPR	23	1636	1637	1643	S28	W48	.837	16983	20.1	7	-F		C	1637	10	.2	
WEND	23	1637	1640	1650	S27	W46	.817	16983	20.2	13	-N		V		114	1.9	D
GRP86395	23	1640+6	1651+1	1705	S26	W72	.971	16980	18.3	25	-F						
HOLL	23	1640	1652	1712	S27	W70	.965	16980	18.4	32	-N	3	C				
HTPR	23	1646	1651	1658	S26	W75	.981	16980	18.1	12	-F		C	1651	10		

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Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs Type	Area Time (UT)	Measurement Appar (Disk)	Corr (Sq Deg)	Remarks
GRP86396	23	1700+1	1701+5	1720	S19	E06	.419	16992	24.2	20	-N			70	.8	E
HTPR	23	1640	1702	1720	S19	E06	.419	16992	24.1	40	-N	* C	1702	60	.6	E
WEND	23	1700	1706	1720	S18	E06	.403	16992	24.2	20	1N	* V		310	3.4	
KANZ	23	1701	1701	1721	S19	E06	.419	16992	24.2	20	-N	*				
HOLL	23	1701	1702	1713	S19	E09	.432	16992	24.4	12	-N	* C		70		
RAMY	23	1701	1701	1723	S19	E06	.419	16992	24.2	22	-N	* C		70		
397 HOLL	23	1802	1805	1811	S27	W70	.965	16980	18.5	9	-F	3 C		16		
398 HOLL	23	1847	1853	1858	S19	E08	.427	16992	24.4	11	-F	3 C		20		
399 HOLL	23	1852	1852	1858	S28	W46	.822	16983	20.3	6	-F	3 C		31		
400 HOLL	23	1908	1939	1952	S13	W38	.667	16985	20.9	44	-F	3 C		77		
401 HOLL	23	1945	1947	1959	S11	W02	.278	16992	23.7	14	-F	3 C		66		
	23	2119	2130	NO FLARE PATROL												
402 HOLL	23	2150	2221	2230	S30	W80	.994	16980	17.9	40	-F	3 C				
403 CULG	23	2204	2208	2212	N21	W51	.787	16981	20.1	8	-N	C	2208	20	.3	
GRP86404	23	2206+5	2215+0	2235	S20	E00	.423	16992	23.9	29	-F			50	.5	
CULG	23	2206	2215U	2228	S21	W02	.440	16992	23.8	22	-F	C	2215	60	.7	
HOLL	23	2211	2215	2241	S19	E02	.409	16992	24.1	30	-F	3 C		51		
405 HOLL	23	2242	2247	2255	S29	W78	.990	16980	18.1	13	-N	3 C				
406 CULG	23	2302	2305	2311	N15	E56	.828	17002	28.2	9	-F	C	2305	40	.7	
407 CULG	23	2352	2357	0005	S22	W38	.719	16985	21.1	13	-F	C	2357	40	1.4	
408 CULG	24	0140	0148	0203	S20	W83	.997	16979	17.8	23	-F	C	0148	30		T
409 CULG	24	0208	0213	0219	S25	W87	1.000	16980	17.6	11	-F	C	0213	50		T
410 CULG	24	0218	0223	0232	S13	W72	.960	16979	18.7	14	-F	C	0223	60		G
411 CULG	24	0229	0232	0238	S26	W84	.999	16980	17.8	9	-F	C	0232	30		T
412 CULG	24	0334	0339	0348	S13	W72	.960	16979	18.7	14	-F	C	0339	40		G
413 CULG	24	0357	0404	0410	S26	W86	1.000	16980	17.7	13	-F	C	0404	40		T
414 CULG	24	0458	0503	0516	S26	W85	.999	16980	17.8	18	-F	C	0503	30		T
415 CULG	24	0526	0530	0542	S23	W49	.824	16983	20.6	16	?N	C	0530	140	2.4	
			IMP.1 NO : TACH CATA													
416 CULG	24	0529	0530	0537	S25	W87	1.000	16980	17.7	8	-F	C	0530	30		T
GRP86417	24	0658+9	0709+5	0735	S23	W51	.840	16983	20.5	37	-N			30	.5	D
HTPR	24	0658	0709	0740	S23	W51	.840	16983	20.5	42	-F	C	0714	30	.5	
HTPR	24	0658	0714	0740	S23	W51	.840	16983	20.5	42	-F	C				
KANZ	24	0702	0714	0730	S24	W51	.844	16983	20.5	28	-B	3				
CATA	24	0705	0710	0720D	S24	W50	.836	16983	20.5	15D	-F	2 P	0710	84	1.6	
PEKG	24	0707	0711	0720E	S23	W51	.840	16983	20.5	13D	-B	P	0711	34	.6	D
418 HTPR	24	0706	0710	0720	S13	W07	.332	16992	23.8	14	-F	C	0710	20	.2	E
419 KANZ	24	0722	0726	0738	S30	W80	.994	16980	18.3	16	-B	3				
GRP86420	24	0736+2	0738+0	0744	S22	W06	.466	16992	23.9	8	-F					
HTPR	24	0736	0738	0741	S23	W08	.488	16992	23.7	5	-F	C	0738	20	.2	
KANZ	24	0738	0738	0746	S21	W05	.448	16992	23.9	8	-F	2				

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GRP86421	24	0850+3	0905+0	0951	S19	W04	.414	16992	24.1	61	1N					EIK
HTPR	24	0850	0905	1026	S19	W04	.414	16992	24.1	96	1N	C	0905	220	2.2	EIK
KANZ	24	0853	0905	0952	S20	W05	.432	16992	24.0	59	-N	1				
ATHN	24	0901E	0905U	0934	S21	W03	.443	16992	24.2	33D	-B	3 C		111		
ATHN	24	0901E	0905	0934	S21	W03	.443	16992	24.2	33D	-B	3 V	0905	111	1.3	
WEND	24	0904E		0950	S19	W04	.414	16992	24.1	46D	1N	V		285	3.1	
86422	24	0854	0858 0910	0920	S24	W15	.539	16992	23.2	26	-F					EK
HTPR	24	0854	0858	0920	S19	W18	.499	16992	23.0	26	-F	C	0858	40	.4	EK
HTPR	24	0856	0858	0900	S28	W16	.595	16992	23.2	4	-F	C	0858	20	.2	
HTPR	24	0902	0910	0920	S24	W12	.521	16992	23.5	18	-F	C	0910	10	.1	
423 HTPR	24	1017	1018	1022	S16	W12	.411	16992	23.5	5	-N	C	1018	30	.3	
424 CATA	24	1140E	1145	1145D	S23	W54	.864	16983	20.4	5D	-F	1 P	1145	56	1.2	
425 HTPR	24	1218	1221	1226	S08	E75	.970	17008	30.1	8	-F	C	1221	10		
426 HOLL	24	1409	1411	1416	S28	W56	.893	16983	20.4	7	-F	3 C		13		
GRP86427	24	1422+1	1423+1	1430	S05	E66	.918	17008	29.5	8	-N			30		
HTPR	24	1422	1423	1430	S07	E65	.913	17008	29.5	8	-B	C	1423	30	.7	
HOLL	24	1423	1424	1429	S03	E67	.923	17008	29.6	6	-N	3 C		27		
GRP86428	24	1505+6	1513+1	1518	S05	E66	.918	17008	29.6	13	-F			15		
HOLL	24	1505	1514	1517	S04	E68	.931	17008	29.7	12	-F	3 C		20		
HTPR	24	1511	1513	1519	S07	E64	.906	17008	29.4	8	-F	C	1513	10	.2	
429 HTPR	24	1555	1557	1558	S07	E64	.906	17008	29.5	3	-N	C	1557	20	.5	
430 HOLL	24	1650	1656	1658	S28	W57	.899	16983	20.4	8	-N	3 C		18		
431 HOLL	24	1754	1754	1808	S04	E66	.917	17008	29.7	14	-F	3 C		35		
432 HTPR	24	1805	1808	1810	S23	W11	.502	16992	23.9	5	-F	C	1808	10	.1	
433 CULG	24	2207	2220 IMP.1	2253 NO : HOLL	S23	E63	.924	17010	29.6	46	?F	C	2220	160	3.7	FG
434 CULG	24	2214	2221	2225	S19	W16	.482	16992	23.7	11	-F	C	2221	40	.5	
435 CULG	24	2219	2239	0052	N20	W37	.628	16988	22.2	153	-F	C	2239	100	1.3	S
436 CULG	24	2312	2316	2324	N21	W66	.912	16981	20.0	12	-F	C	2316	40	.6	
437 HOLL	24	2355	2404	0020	S30	W80	.994	16980	19.0	25	-N	3 C				
438 CULG	25	0035	0040	0051	S08	E62	.893	17008	29.7	16	-F	C	0040	30	.6	T
439 PEKG	25	0046	0047	0049	S21	W15	.501	16992	23.9	3	-F	C	0047	13	.1	D
	25	0146	0156	NO FLARE PATROL												
440 CULG	25	0156	0202	0213	S09	E59	.870	17008	29.5	17	-F	C	0202	40	.8	T
441 PEKG	25	0212	0217	0222	S18	W13	.447	16992	24.1	10	-F	P	0217	21	.2	E
	25	0228	0310	NO FLARE PATROL												
442 PEKG	25	0437	0438	0440	S20	W57	.878	16985	20.9	3	-N	C	0438	8	.2	D
443 PEKG	25	0445	0447	0450	S20	W51	.830	16985	21.4	5	-N	C	0447	21	.4	D
444 PEKG	25	0517	0520	0527	N11	E03	.113	16998	25.4	10	-F	C	0520	59	.6	E
445 KANZ	25	0737	0741	0748	S29	W73	.978	16983	19.8	11	-F	2				
446 HTPR	25	0749	0749	0751	S06	E57	.848	17008	29.6	2	-N	C	0749	40	.7	

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GRP86447	25	0755+1	0756+2	0804	N26	E64	.902	17014	30.1	9	-N				50		D
PEKG	25	0755	0758	0803	N27	E66	.916	17014	30.3	8	-N		P	0758	50		D
HTPR	25	0755	0756	0804	N26	E61	.881	17014	29.9	9	-N	*	C	0756	40	.8	
YUNN	25	0756	0757	0805	N25	E64	.901	17014	30.1	9	-N	*	C		64	1.5	
448 KHAR	25	0800E		0822D	S26	W52	.859	16985	21.4	22D	-F		P	0816	30	.5	DL
GRP86449	25	0811	0812	0818	N17	E38	.629	17002	28.2	7	-F						H
HTPR	25	0811	0812	0814	N17	E38	.629	17002	28.2	3	-F		C	0812	20	.3	
KHAR	25	0812E		0822D	N17	E38	.629	17002	28.2	10D	-F		P	0816	60	.8	H
450 ABST	25	0817E	0826	0837	S23	E60	.906	17010	29.8	20D	?F		P	0826	87		DJ
			IMP.1 NO : YUNN KANZ HTPR WEND														
451 KHAR	25	0824E		0832D	S26	W58	.901	16985	21.0	8D	-F		V	0824	30	.7	D
GRP86452	25	0827+8	0839+9 0859	0905	N18	W33	.569	16989	22.9	38	-N				110	1.4	EJKU
HTPR	25	0827	0840	0920	N17	W36	.604	16989	22.7	53	-N		C	0840	70	.9	EK
HTPR	25	0827	0848	0920	N17	W36	.604	16989	22.7	53	-N		C				
KHAR	25	0829E	0831	0838D	N16	W36	.601	16989	22.7	9D	-N		P	0837	120	1.5	E
KANZ	25	0831	0846	0914	N18	W32	.556	16989	23.0	43	-N	2					U
ABST	25	0833	0843	0853	N16	W30	.579	16989	23.1	20	-N		C	0843	131	1.6	EJ
PEKG	25	0835	0839	0907	N19	W33	.573	16989	22.9	32	-B		C	0839	88	1.1	EKU
YUNN	25	0842	0847	0902	N20	W32	.566	16989	23.0	20	-N		C		145	1.8	
WEND	25	0843E		0858	N18	W34	.582	16989	22.8	15D	-N		V		120	1.6	
PEKG	25	0845E	0845	0845D	N18	W33	.569	16989	22.9		1B		C	0845	210	2.6	FKU
CATA	25	0850E	0855	0855D	N18	W33	.569	16989	22.9	5D	1F	2	P	0855	225	2.8	
KHAR	25	0854E	0859	0912D	N18	W33	.569	16989	22.9	18D	-F		P	0855	80	1.0	E
453 PEKG	25	0839	0841	0849	S21	W21	.550	16992	23.8	10	-N		C	0841	21	.3	D
GRP86454	25	0841E	0848+0	0913	N14	00	.153	16998	25.4	32	-F						EJ
ABST	25	0841E	0848	0852D	N11	E03	.113	16998	25.6	11D	-F		P	0848	131	1.3	EJ
ATHN	25	0845E	0848	0913	N18	W03	.227	16998	25.1	28D	-N	3	V	0848	32	.3	
455 HTPR	25	0931	0933	0936	S06	E56	.839	17008	29.6	5	-F		C	0933	*30	.4	
456 HTPR	25	1022	1024	1026	S34	E44	.840	17005	28.7	4	-F		C	1024	10	.1	
457 KHAR	25	1054E		1102D	S24	E42	.769	17003	28.6	8D	-F		P				EHL
GRP86458	25	1138+1	1140+0	1143	S05	E56	.837	17008	29.7	5	-F						DH
KHAR	25	1138	1140	1142	S04	E57	.845	17008	29.8	4	-N		V	1140			DH
HTPR	25	1139	1140	1143	S06	E55	.829	17008	29.6	4	-F		C	1140	20	.3	
459 KHAR	25	1208E		1218D	N11	E00	.101	16998	25.5	10D	-N		P	1210			D
460 HTPR	25	1216	1224	1345	S22	W21	.561	16992	23.9	89	-F		C	1224	50	.5	
461 KANZ	25	1420	1428	1432	N07	W83	.991	16995	19.4	12	-N	2					
462 HOLL	25	1435	1435	1448	S14	W58	.872	16985	21.3	13	-F	3	C		23		
GRP86463	25	1440+4	1442+2	1448	N12	W02	.123	16998	25.5	8	-F				25	.3	L
RAMY	25	1426	1427	1442	N10	W02	.090	16998	25.5	16	-F	*	C		32		
HTPR	25	1440	1442	1447	N15	W01	.171	16998	25.5	7	-F	*	C	1442	20	.2	
HOLL	25	1443	1444	1448	N10	W03	.098	16998	25.4	5	-F	*	C		29		
KANZ	25	1444	1444	1452	N15	W03	.177	16998	25.4	8	-F	*					L
GRP86464	25	1541+0	1542+1	1559	S29	W74	.981	16983	20.1	18	-F						
RAMY	25	1541	1543	1556	S29	W75	.983	16983	20.0	15	-N	3	C				
HOLL	25	1541	1542	1601	S29	W73	.978	16983	20.2	20	-F	3	C				
GRP86465	25	1558+7	1604+1	1619	S05	E57	.847	17008	29.9	21	-N				50	.9	E
HOLL	25	1558	1605	1708	S04	E56	.836	17008	29.9	70	-N	*	C		101		
HTPR	25	1559	1604	1615	S07	E57	.850	17008	29.9	16	-F	*	C	1604	40	.8	E
RAMY	25	1605	1605	1623	S06	E57	.848	17008	29.9	18	-N	*	C		48		
HUAN	25	1607E		1610	S05	E57	.847	17008	29.9	3D	-F	*	P				CE
466 HTPR	25	1600	1604	1609	S13	W27	.536	16992	23.6	9	-F		C	1604	20	.2	

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GRP86467	25	1706+1	1708+3	1739	S33	E90	1.001	17016	1.5	33	-N						
BIGB	25	1706	1708	1739	S33	E90	1.001	17016	1.5	33	1N	3	C	1708	90		
KANZ	25	1707	1711	1719D	S34	E90	1.001	17016	1.5	12D	-N	1					
GRP86468	25	1717+1	1718+1	1727	S21	W23	.568	16992	24.0	10	-F				20	.2	
RAMY	25	1717	1719	1724	S21	W23	.568	16992	24.0	7	-F	3	C		22		
HOLL	25	1718	1718	1729	S21	W23	.568	16992	24.0	11	-N	3	C		23		
469 HOLL	25	2018	2018	2025	S20	W24	.567	16992	24.0	7	-F	3	C		28		
470 HOLL	25	2151	2152	2215	S21	W25	.586	16992	24.0	24	-N	3	C		57		
GRP86471	26	0117+2	0119+5 0135	0143	S07	E53	.812	17008	30.0	26	1N				170	2.9	F
HOLL	26	0102	0120	0132D	S07	E50	.781	17008	29.8	30D	1B	3	C		169		
BIGB	26	0117	0119	0129D	S07	E53	.812	17008	30.0	12D	-N	3	P	0119	110	1.9	
PEKG	26	0119	0124	0146	S07	E53	.812	17008	30.0	27	1N		C	0124	236	4.2	F
YUNN	26	0131	0135	0140	S08	E53	.814	17008	30.0	9	1N		C		193	3.4	
	26	0205	0222	NO FLARE PATROL													
472 PEKG	26	0222	0224	0231	N19	E71	.942	17012	31.4	9	-N		P	0224	63		D
473 PEKG	26	0222	0224	0229	S21	W70	.959	16985	20.8	7	-N		P	0224	29		D
474 PEKG	26	0304	0306	0309	S20	W69	.953	16985	21.0	5	-N		P	0306	29		D
475 PEKG	26	0308	0310	0313	S20	W30	.627	16992	23.9	5	-F		C	0310	97	1.3	E
476 TACH	26	0325E		0328D	S17	W74	.972	16985	20.6	3D	-F		V	0325	132		E
GRP86477	26	0504+0	0505+1	0514	S19	W68	.947	16985	21.1	10	-F				20		
CULG	26	0504	0506	0518	S18	W70	.955	16985	21.0	14	-N		C	0506	20		
HTPR	26	0504	0505	0510	S20	W67	.943	16985	21.2	6	-F		C	0505	20	.5	
478 PEKG	26	0547	0549	0552	S20	W69	.953	16985	21.1	5	-N		P	0549	34		E
GRP86479	26	0607	0615	0630	S07	E47	.749	17008	29.8	23	-F						E
HTPR	26	0607	0615	0630	S07	E48	.760	17008	29.9	23	-F		C	0615	60	.9	E
WEND	26	0612E		0630	S08	E46	.740	17008	29.7	18D	-F		V		135	2.0	
GRP86480	26	0641+3	0646	0649	S19	W69	.952	16985	21.1	8	-N						E
ISTA	26	0641		0649	S19	W69	.952	16985	21.1	8	-N			0643			E
KANZ	26	0641		0652	S20	W69	.953	16985	21.1	11	-F	2					
PEKG	26	0644	0646	0648	S19	W69	.952	16985	21.1	4	-N		P	0645	29		E
481 ABST	26	0656	0658	0705	S18	E45	.767	17010	29.7	9	-F		C	0658	87	1.4	DJ
482 PEKG	26	0704	0716	0729	S06	E48	.757	17008	29.9	25	-N		P	0716	126	2.0	E
GRP86483	26	0709+4	0713+6	0723	S19	W30	.619	16992	24.0	14	1N				190	2.4	EJ
PEKG	26	0709	0716	0724	S19	W31	.630	16992	24.0	15	1N		P	0716	210	2.8	E
HTPR	26	0711	0713	0721	S19	W31	.630	16992	24.0	10	-F		C	0713	70	.8	E
KANZ	26	0711	0719	0727	S20	W30	.627	16992	24.0	16	-N	2					
ABST	26	0711	0717	0723	S20	W35	.617	16992	23.7	12	1N		C	0717	174	2.2	EJ
ISTA	26	0712		0721	S20	W29	.617	16992	24.1	9	-F						E
WEND	26	0713	0718	0724	S19	W30	.619	16992	24.1	11	1N		V		300	3.8	
484 ABST	26	0712	0717	0720	N29	W47	.769		22.8	8	-F		C	0717	87	1.4	DJ
GRP86485	26	0745+0	0751+4	0805	S07	E47	.749	17008	29.8	20	-F						E
HTPR	26	0745	0751	0805	S07	E47	.749	17008	29.8	20	-F		C	0751	30	.4	E
YUNN	26	0745	0755	0804	S08	E47	.752	17008	29.8	19	-N		C		80	1.3	
GRP86486	26	0821>9	0842 0856	0919	S06	E46	.735	17008	29.8	58	-F						EH
KHAR	26	0821E	0842	0928D	S06	E46	.735	17008	29.8	67D	-N		P	0842	80	1.2	EH
HTPR	26	0836	0856	0910	S07	E47	.749	17008	29.9	34	-F		C	0856	50	.7	E
487 KHAR	26	0834E		0840D	S20	W35	.678	16992	23.7	6D	-F		P	0837	45	.6	D

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488	KHAR	26	0929E		0932D	N26	E67	.921	17007	31.4	3D	-F		V	0929			D
489	KHAR	26	0930E		0952D	N21	E33	.583	17002	28.9	22D	-F		P	0930			E
490	KHAR	26	0936E		0952D	N18	E66	.910	17012	31.3	16D	-F		V	0936			
GRP86491		26	1015+4	1017+6	1027	S20	W35	.678	16992	23.8	12	-F				35	.5	D
	HTPR	26	1015	1020	1026	S19	W35	.671	16992	23.8	11	-F		C	1020	40	.5	E
	KHAR	26	1017E	1017	1027D	S20	W35	.678	16992	23.8	10D	-F		V	1020			D
	KANZ	26	1019	1023	1031	S20	W33	.658	16992	24.0	12	-F	2					
	PEKG	26	1019	1021	1025	S20	W35	.678	16992	23.8	6	-F		P	1021	34	.5	D
GRP86492		26	1031+4	1041+2 1055	1110	N18	E63	.889	17012	31.2	39	-F						E
	KANZ	26	1031	1043	1056	N19	E63	.889	17012	31.2	25	-N	2					
	KHAR	26	1034E	1041	1117D	N18	E66	.910	17012	31.4	43D	1F		P	1041	110		E
	HTPR	26	1035	1055	1110	N17	E62	.881	17012	31.1	35	-F		C	1055	40	.8	E
493	KHAR	26	1108E	1108	1111D	S08	E45	.729	17008	29.8	3D	-F		P	1108	30	.5	D
494	KHAR	26	1108E	1111	1120D	N14	W75	.962	16987	20.8	12D	-F		P	1111	40		D
GRP86495		26	1302	1313+4	1324	N17	E64	.896	17012	31.3	22	-N				45	1.1	D
	HTPR	26	1302	1313	1322	N17	E61	.872	17012	31.1	20	-N		C	1313	30	.6	
	WEND	26	1305E		1324	N17	E64	.896	17012	31.3	19D	-N		V		88		D
	RAMY	26	1317	1317	1345	N20	E66	.911	17012	31.5	28	-F	3	C		56		
496	HTPR	26	1601		1620D	S30	W25	.678	16992	24.8	19D	-F		C	1606	20	.2	
GRP86497		26	1730+1	1733+4	1902	S07	E43	.703	17008	30.0	92	-N						
	HOLL	26	1730	1733	1913	S07	E43	.703	17008	30.0	103	1B	3	C		227		
	HUAN	26	1731	1737	1742	S05	E46	.732	17008	30.2	11	-F	1	C	1737	80	1.2	E
	WEND	26	1733E		1825D	S08	E42	.694	17008	29.9	52D	-N		V		100	1.4	D
	HUAN	26	1759		1850	S06	E45	.723	17008	30.1	51	-F	1	C	1810	50	.7	
498	HOLL	26	2206	2207	2222	S10	E46	.747	17008	30.4	16	-F	3	C		37		
499	HOLL	26	2300	2302	2307	S08	E44	.718	17008	30.3	7	-F	3	C		22		
500	CULG	26	2301	2303	2312	S21	W44	.772	16992	23.7	11	-F		C	2303	80	1.2	
GRP86501		26	2351+1	2352+2	0004	S19	W90	1.000	16983	20.2	13	1N				60		
	CULG	26	2351	2352	2359	S18	W90	1.000	16983	20.2	8	1N		C	2352	60		
	BIGB	26	2352	2354	0009D	S20	W90	1.000	16983	20.2	17D	1B	3	P	2354	60		
502	CULG	27	0009	0014	0034	S34	E43	.834	17011	30.2	25	-F		C	0014	60	1.0	G
GRP86503		27	0025+5	0035+1	0052	N17	E54	.810	17012	31.1	27	-F				60	1.0	
	CULG	27	0025	0035	0050	N17	E54	.810	17012	31.1	25	-F		C	0035	70	1.2	
	YUNN	27	0030	0036	0053	N17	E55	.819	17012	31.1	23	-F		C		48	.8	
504	CULG	27	0042	0047	0100	S21	W42	.754	16992	23.9	18	-N		C	0047	20	.3	
GRP86505		27	0554	0600+5	0620	S11	E41	.694	17008	30.3	26	-N				90	1.2	
	YUNN	27	0554	0605	0616	S12	E40	.687	17008	30.2	22	-N		C		80	1.2	
	CATA	27	0600E	0600	0610D	S11	E41	.694	17008	30.3	10D	-F	2	P	0600	84	1.2	
	ATHN	27	0602E	0604	0623	S10	E42	.702	17008	30.4	21D	-N	3	V	0604	95	1.4	
	ATHN	27	0602E	0604U	0623	S10	E42	.702	17008	30.4	21D	-N	3	C		95		
506	MANI	27	0559	0602U	0606D	N27	E42	.712	17014	30.4	7D	-N	1	V		40	.6	F
GRP86507		27	0640+1	0644	0705	S11	E41	.694	17008	30.4	25	-N				130	1.8	
	BUCA	27	0640		0652D	S11	E41	.694	17008	30.4	12D	-N		C	0645	107	1.5	
	ATHN	27	0641	0644	0702	S10	E42	.702	17008	30.4	21	-N	3	V	0644	111	1.6	
	YUNN	27	0645E	0645	0708	S12	E41	.699	17008	30.4	23D	1N		P		161	2.3	
GRP86508		27	0906>9	0916+5	0932	S07	E34	.589	17008	29.9	26	-N				120	1.5	E
	YUNN	27	0906	0916	0937	S08	E34	.594	17008	29.9	31	-N		C		129	1.7	
	CATA	27	0915	0920	0925	S08	E34	.406	17008	29.9	10	-F	2	C	0920	112	1.3	
	KHAR	27	0919	0920	0927D	S06	E34	.585	17008	29.9	8D	-N		P	0920	120	1.5	E
	ATHN	27	0920E	0921	0939	S07	E34	.589	17008	29.9	19D	-N	3	V	0921	111	1.4	

H - ALPHA SOLAR FLARES

JULY 1980

Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs Type	Area Measurement Time (UT)	Appar (Disk)	Corr (Sq Deg)	Remarks
509 YUNN	27	1006	1015	1016D	S14	E38	.674	17008	30.3	10D	-N	C		80	1.1	
GRP86510	27	1108+2	1115+5	1146	S11	E39	.671	17008	30.4	38	-F					E
KHAR	27	1108E	1120	1146D	S11	E39	.671	17008	30.4	38D	1F	P	1120	170	2.3	E
CATA	27	1110	1115	1145	S12	E40	.687	17008	30.5	35	-F 2	C	1115	56	.8	
511 KHAR	27	1120E	1120	1131D	N12	W28	.476	16998	25.4	11D	-F	P	1120	30	.4	D
512 KHAR	27	1125E	1126	1130D	S20	W48	.805	16992	23.9	5D	-F	P	1126	40	.8	D
513 KHAR	27	1143E	1143	1146D	N16	W72	.947	16989	22.1	3D	-N	P	1143	80		
GRP86514	27	1237	1242+2	1256	S10	E37	.642	17008	30.3	19	-N					
RAMY	27	1237	1244	1259	S11	E39	.671	17008	30.5	22	-N 3	C		58		
ATHN	27	1238E	1242	1253	S09	E36	.625	17008	30.2	15D	-N 3	C		159		
ATHN	27	1238E	1242	1253	S09	E36	.625	17008	30.2	15D	-N 3	V	1242	159	2.1	
515 HOLL	27	1435	1437	1443	N13	W73	.952	16989	22.1	8	-F 3	C				
GRP86516	27	1443+1	1446	1454	S34	W20	.691	17001	26.1	11	-F			45	.6	
RAMY	27	1443	1446	1454	S34	W20	.691	17001	26.1	11	-F 3	C		50		
HUAN	27	1444		1450D	S35	W21	.707	17001	26.0	6D	-F 1	P	1447	40	.6	
GRP86517	27	1444+0	1446+0	1509	S11	E37	.647	17008	30.4	25	-F			70	.9	
RAMY	27	1444	1446	1503	S11	E38	.659	17008	30.5	19	-F 3	C		66		
HOLL	27	1444	1446	1515	S11	E37	.647	17008	30.4	31	-F 3	C		73		
518 HOLL	27	1710	1710	1724	N29	E47	.769	17007	31.2	14	-F 3	C		26		
	27	2014	2015	NO FLARE PATROL												
519 VORO	27	2117	2118	2120	N11	W38	.616	16998	25.0	3	-N	C	2118	108	1.4	E
520 VORO	27	2141	2142	2151	S11	E34	.610	17008	30.5	10	-N	C	2141	99	1.3	EJ
GRP86521	27	2204+1	2205+2	2218	N19	E44	.707	17012	31.2	14	-F			45	.6	E
VORO	27	2204	2207	2221	N19	E47	.740	17012	31.4	17	-F	C	2207	63	1.1	E
HOLL	27	2205	2205	2215	N19	E42	.683	17012	31.1	10	-F 3	C		26		
522 VORO	27	2252	2256	2332	S09	E23	.455	17008	29.7	40	-F	C	2256	36	.4	DJ
GRP86523	28	0008+1	0011+3	0041	S12	E33	.604	17008	30.5	33	-N					EJ
BIGB	28	0008	0011	0049	S12	E34	.616	17008	30.6	41	-N 3	C	0011	60	.7	
VORO	28	0009	0014	0032	S12	E33	.604	17008	30.5	23	1N	C	0014	197	2.5	EJ
524 VORO	28	0235	0236	0240	S08	E18	.382	17008	29.5	5	-N	C	0236	72	.8	E
	28	0250	0253	NO FLARE PATROL												
525 ABST	28	0504	0508	0511	N24	W36	.633	16997	25.5	7	-F	C	0508	87	1.2	D
526 ABST	28	0507	0511	0515	S14	E16	.424	17008	29.4	8	-F	C	0511	87	.9	D
527 PEKG	28	0620	0623	0627	S07	E52	.802	17013	1.2	7	-F	P	0621	52	.9	D
528 ISTA	28	0625		0639	S14	W90	1.000	16985	21.5	14	?N					A
		IMP.1 NO : YUNN ABST														
529 ISTA	28	0640		0649	N16	W84	.992	16989	22.0	9	-F					D
530 ABST	28	0640	0643	0650	N34	W90	.999		21.5	10	?F	C	0643	87		DG
		IMP.1 NO : YUNN CATA KANZ														
531 CATA	28	0640E	0640	0650	S36	E60	.938	17016	1.8	10D	-F 2	P	0640	56		

H - ALPHA S O L A R F L A R E S

JULY 1980

Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp	Obs Type	Area Measurement Time (UT)	Appar (Disk)	Corr (Sq Deg)	Remarks
GRP86532	28	0732+3	0735>9 0806	0807	S10	E27	.515	17008	30.3	35	-N					
KANZ	28	0732	0739	0803	S12	E31	.580	17008	30.6	31	-N	3				
ISTA	28	0733		0800	S09	E29	.535	17008	30.5	27	-N					F
YUNN	28	0735	0737	0811	S12	E28	.543	17008	30.4	36	-B	C		80	1.0	
PEKG	28	0735	0742	0800	S11	E29	.548	17008	30.5	25	1B	C	0741	210	2.6	E
CATA	28	0735	0735	0805D	S11	E28	.535	17008	30.4	30D	-F	2 P	0735	84	1.0	
WEND	28	0735E		0800D	S08	E28	.515	17008	30.4	25D	-N	V	0740	143	1.7	D
ATHN	28	0743E	0745	0819	S07	E23	.440	17008	30.0	36D	-B	3 V	0745	64	.7	
ATHN	28	0743E	0745	0819	S07	E23	.440	17008	30.0	36D	-B	3 C		64		
KANZ	28	0806	0806	0810	S07	E15	.333	17008	29.5	4	-B	3				E
GRP86533	28	0802+1	0826	0839	S37	E61	.945	17016	1.9	37	-N					G
YUNN	28	0802	0826	0839	S37	E58	.931	17016	1.7	37	-N	C		32		
KANZ	28	0803	0810	0810D	S37	E64	.957	17016	2.1	7D	-N	3				G
GRP86534	28	1109+1	1110+0	1129	S06	E19	.377	17008	29.9	20	-F					
RAMY	28	1109	1110	1129	S07	E21	.413	17008	30.0	20	-F	3 C		53		
KANZ	28	1110	1110	1118D	S06	E18	.363	17008	29.8	8D	-N	2				
535 RAMY	28	1153	1153	1201	S05	E18	.355	17008	29.8	8	-F	3 C		37		
536 CULG	29	0105	0107	0120	S08	E17	.370	17008	30.3	15	-N	C	0107	80	.8	
537 CULG	29	0337	0344	0410	S06	E04	.212	17008	29.5	33	-B	C	0344	160	1.6	
538 CULG	29	0345	0357	0404	S07	E15	.334	17008	30.3	19	-N	C	0357	20	.2	
539 CULG	29	0356	0417	0429	S23	E63	.926	17015	2.9	33	?F	C	0417	90	2.3	
			IMP.1 NO : PALE TACH YUNN													
540 CULG	29	0446U	0452	0544U	S07	E15	.334	17008	30.3	58D	-F	C	0452	20	.2	K
541 CULG	29	0451	0456	0508	S22	W21	.565		27.6	17	-F	C	0456	20	.2	
542 CULG	29	0513	0536	0545	S27	W39	.764	17018	26.3	32	-F	C	0536	20	.3	
543 KANZ	29	0903		1006	S23	W90	1.001	16992	22.6	63	-N	3				Y
GRP86544	29	1006+4	1007+3 1018	1020	S22	W90	1.001	16992	22.7	14	-N					AY
KANZ	29	1006	1018	1106	S22	W85	.999	16992	23.0	60	2B	3				Y
HTPR	29	1007	1007	1011	S20	W90	1.001	16992	22.7	4	-F	C	1007	10		
CATA	29	1010	1010	1020	S22	W90	1.001	16992	22.7	10	-F	2 C	1010	28		A
545 HTPR	29	1114	1117	1132	N18	E26	.474	17012	31.4	18	-F	C	1117	20	.2	
546 HTPR	29	1115	1116	1125	S07	W03	.223	17008	29.2	10	-F	C	1116	10	.1	
GRP86547	29	1249+8	1256+6 1323	1358	S24	W64	.933	16992	24.7	69	1N					K
HTPR	29	1249	1256	1350	S23	W64	.931	16992	24.7	61	-N	C	1256	60	1.4	EK
HTPR	29	1249	1308	1350	S23	W64	.931	16992	24.7	61	-N	C				
KANZ	29	1254	1323	1423	S24	W66	.944	16992	24.6	89	2N	2				F
RAMY	29	1257	1302	1358	S28	W60	.919	16992	25.0	61	1N	3 C		223		
548 HTPR	29	1344	1346	1400	S07	E02	.220	17008	29.7	16	-F	C	1346	30	.3	
549 HOLL	29	1437	1443	1455	S28	W61	.925	16992	25.0	18	-F	3 C		13		
550 BIGB	29	2049	2053	2131	S17	W90	1.000	16992	23.1	42	?N	3 C	2053	70		
			IMP.1 NO : RAMY PALE													
551 BIGB	29	2223	2227	2241	S11	W90	1.000	16992	23.2	18	?N	3 C	2227	50		
			IMP.1 NO : VORO													
552 VORO	29	2230	2232	2243	S12	E07	.323	17008	30.5	13	-F	C	2232	63	.7	D
GRP86553	30	0536	0538 0555	0600	S13	E02	.321	17008	30.4	24	-F					E
HTPR	30	0536	0538	0600	S13	E03	.323	17008	30.5	24	-F	C	0538	40	.4	E
CULG	30	0547E	0555U	0557D	S13	E01	.320	17008	30.3	10D	-F	P	0555	30	.3	

H - ALPHA S O L A R F L A R E S

JULY 1980

Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Cen Dist	Hale Plage Region	CMP Day	Dur (Min)	Imp		Obs Type	Area Time (UT)	Measurement Appar (Disk)	Corr (Sq Deg)	Remarks
554 HTPR	30	0829	0835	0845	S08	W06	.257	17008	29.9	16	-F		C	0835	10	.1	
555 KHAR	30	0900E	0920	0945D	N11	W74	.958	16998	24.8	45D	?F		V	0920			
			IMP.1 NO : HTPR														
556 KHAR	30	0900E		1007D	S36	E35	.799	17016	2.0	67D	-F		V	0920			D
557 KHAR	30	0927E	0928	0954D	N12	E13	.248	17017	31.4	27D	-F		V	0943			H
GRP86558	30	0930	0934+3	0957	S31	E63	.942	17020	4.1	27	-F						D
HTPR	30	0930	0934	0950	S32	E60	.929	17020	3.9	20	-F		C	0934	30	.6	
KHAR	30	0935E	0937	1004D	S31	E66	.955	17020	4.3	29D	-F		V	0937			D
559 KHAR	30	0947E	1045	1146D	N19	E57	.839	17019	3.7	119D	-F		V	0947			DH
560 KHAR	30	0956E	1020	1113D	N10	W74	.958	16998	24.9	77D	?N		V	1020			D
			IMP.1 NO : HTPR CATA														
561 KHAR	30	1007E		1013D	N12	E17	.308	17017	31.7	6D	-F		V	1007			D
562 KHAR	30	1024E	1057	1124D	S36	E34	.792	17016	2.0	60D	-F		V	1024			D
563 HUAN	30	2008		2022	S05	E90	1.000	17023	6.6	14	-F	1	C	2016	20		D
	30	2056	2058	NO FLARE PATROL													
GRP86564	30	2245+0	2248+4	2302	S13	W07	.340	17008	30.4	17	-F						
CULG	30	2245	2252	2305	S13	W08	.346	17008	30.3	20	-F		C	2252	120	1.2	
HOLL	30	2245	2248	2259	S13	W06	.335	17008	30.5	14	-F	3	C		23		
565 VORO	31	0131	0140	0155	N17	E47	.746	17019	3.6	24	-F		C	0140	90	1.3	E
566 CULG	31	0217	0220	0235U	S12	W10	.347	17008	30.3	18D	-F		C	0220	80	.8	
567 CULG	31	0355	0404	0435	S34	E53	.897	17020	4.1	40	?N		C	0404	200	4.0	F
			IMP.1 NO : TACH MITK														
568 PEKG	31	0647	0649	0653	N14	E85	.994	17022	6.7	6	-F		P	0649	8		D
569 PEKG	31	0649E	0649	0700U	N19	E45	.717	17019	3.7	11D	-N		P	0649	63	.9	E
GRP86570	31	0649>9	0701+1	0711	S36	E20	.716	17016	1.8	22	-F				60	.8	E
PEKG	31	0649	0702	0705	S37	E21	.731	17016	1.9	16	-F	*	C	0702	84	1.3	E
ISTA	31	0656		0711	S35	E19	.700	17016	1.7	15	-F	*					E
HTPR	31	0659	0701	0713	S36	E19	.711	17016	1.7	14	-F	*	C	0701	20	.2	E
CULG	31	0659	0701	0705D	S37	E22	.736	17016	1.9	6D	-N	*	P	0701	60	.8	
GRP86571	31	0828+7	0835+5	0850	S32	E47	.852	17020	3.9	22	-N				80	1.4	E
HTPR	31	0828	0835	0850	S33	E46	.851	17020	3.8	22	-N		C	0835	70	1.0	E
PEKG	31	0833	0840	0849	S32	E48	.859	17020	4.0	16	-N		C	0840	88	1.7	E
CATA	31	0835	0835	0900	S31	E47	.848	17020	3.9	25	-F	2	C	0835	68	1.3	
GRP86572	31	0914+6	0918+2	0931	S18	W90	1.000	16992	24.6	17	-F						A
PEKG	31	0914	0918	0931	S17	W90	1.000	16992	24.6	17	-F		C				A
CATA	31	0920	0920	0930	S19	W90	1.001	16992	24.6	10	1F	2	C	0920	140		A
573 HTPR	31	1652	1706	1735	N27	W03	.367	17007	31.5	43	-F		C	1706	20	.2	
	31	1952	2149	NO FLARE PATROL													
GRP86574	31	2230>9	2250+4	2350	N27	W06	.376	17007	31.5	80	1N						FJU
CULG	31	2230	2251	2345U	N27	W08	.385	17007	31.3	75D	2N		C	2251	680	6.8	JF
BIGB	31	2243	2250	2343D	N25	W06	.344	17007	31.5	60D	1N	3	P	2250	210	2.2	
MANI	31	2251E	2254U	2305D	N28	W06	.236	17007	31.5	14D	-F	1	V		30	.3	F
VORO	31	2303E		2350	N28	W06	.388	17007	31.5	47D	1N		C	2303	269	3.3	EJ

"Remarks":

A = Eruptive prominence whose base is less than 90° from central meridian.
B = Probably the end of a more important flare.
C = Invisible 10 minutes before.
D = Brilliant point.
E = Two or more brilliant points.
F = Several eruptive centers.
G = No visible spots in the neighborhood.
H = Flare accompanied by high-speed dark filament.
I = Active region very extended.
J = Distinct variations of plage intensity before or after the flare.
K = Several intensity maxima.
L = Existing filaments show signs of sudden activity.
M = White-light flare.
N = Continuous spectrum shows effects of polarization.
O = Observations have been made in the H and K lines of CaII.
P = Flare shows helium D3 in emission.
Q = Flare shows Balmer continuum in emission.
R = Marked asymmetry in H-alpha line suggests ejection of high-velocity material.
S = Brightness follows disappearance of filament in same position.
T = Region active all day.
U = Two bright branches, parallel or converging.
V = Occurrence of an explosive phase: important, expansion within roughly 1 minute that often includes a significant intensity increase.
W = Great increase in area after time of maximum intensity.
X = Unusually wide H-alpha line.
Y = System of loop-type prominences.
Z = Major sunspot umbra covered by flare.

DAILY FLARE INDICES
(Includes all Flares)

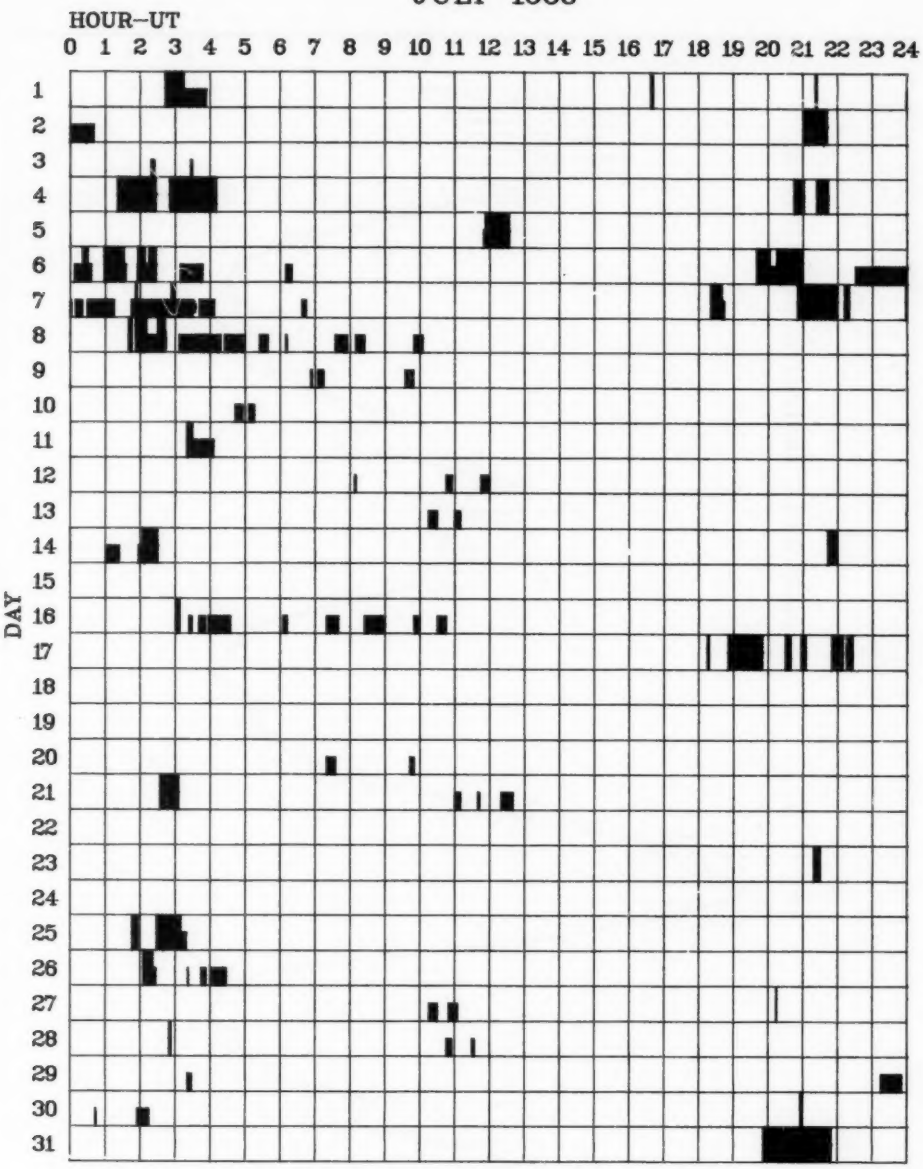
JULY 1980

Day	Flare Index	Hours Observed	Day	Flare Index	Hours Observed	Day	Flare Index	Hours Observed
01	41.90	22.7	11	189.0	23.9	21	174.43	23.5
02	23.29	23.4	12	151.80	24.0	22	101.86	24.0
03	59.44	24.0	13		24.0	23	3168.37	23.8
04	30.19	21.0	14	172.70	23.3	24	68.41	24.0
05	89.05	23.3	15	99.01	24.0	25	74.37	23.1
06	27.33	21.8	16	109.41	23.9	26	78.19	23.7
07	67.08	22.2	17	422.64	22.2	27	59.30	24.0
08	40.02	23.4	18	211.03	24.0	28	35.68	23.9
09	41.60	24.0	19	73.55	24.0	29	51.51	24.0
10	55.22	24.0	20	231.23	24.0	30	33.78	24.0
						31	48.10	22.0

INTERVALS OF NO FLARE PATROL OBSERVATION

FOR PRECEDING SOLAR FLARE TABLE

JULY 1980

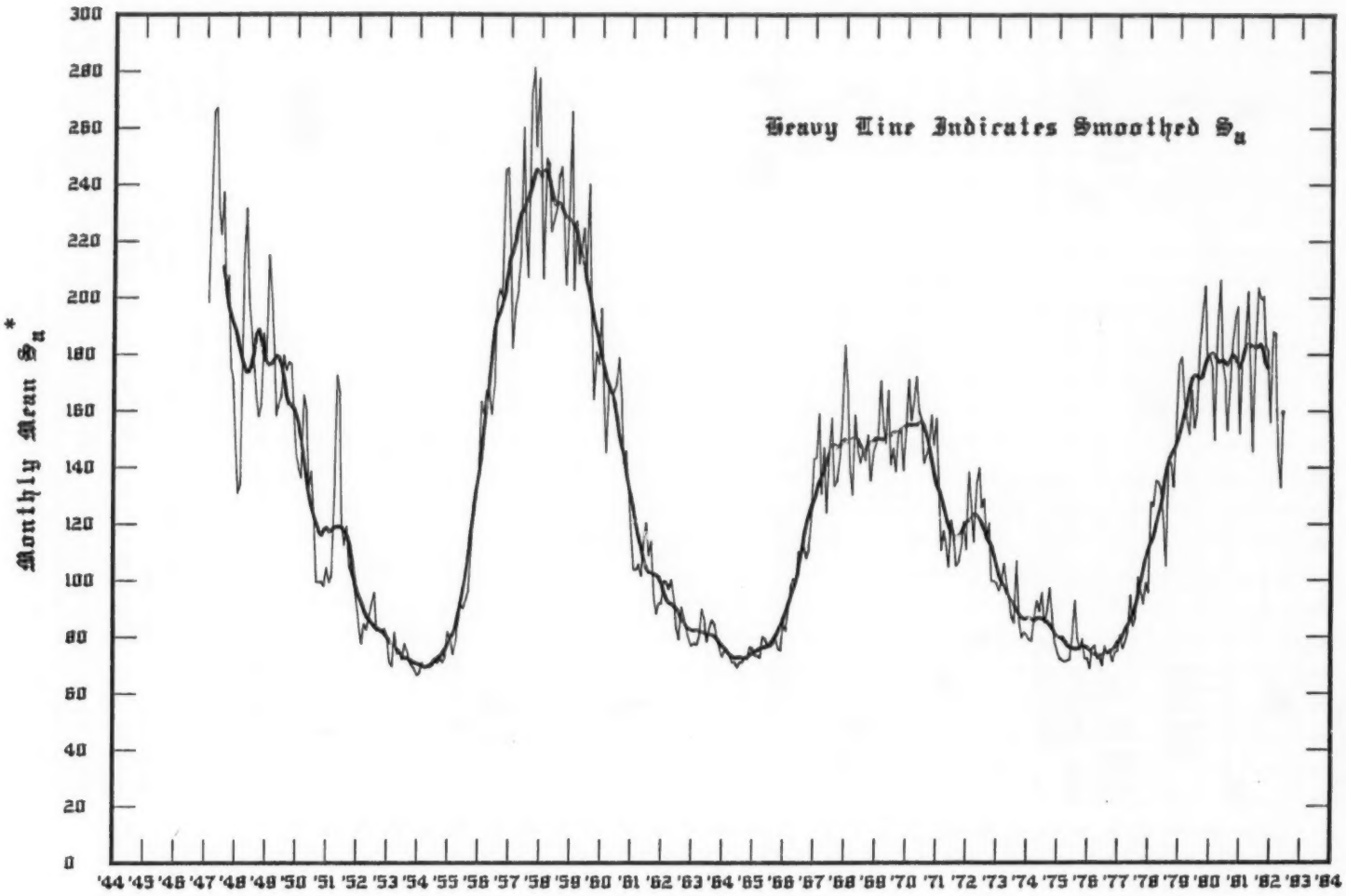


Observatories included in total patrol:

Abastumani	Culgoora	Istanbul	Mitaka	Tashkent
Athens	Georgiana	Kanzelhoehe	Palehua	Voroshilov
Big Bear	Haute Provence	Kharkov	Peking	Wendelstein
Bucharest	Holloman	Lvov	Purple Mt.	Yunnan
Catania	Huancayo	Manila	Ramey	

Times of no flare patrol are shown by the shaded area for each day divided into times of no cinematographic patrol (bottom half of day) and times of neither visual nor cinematographic patrol (top half of day).

Monthly Mean Ottawa 10.7 cm Solar Radio Flux
February 1947 – June 1982



* Solar Flux Units (10^{-22} W/m^2 Hz) Adjusted to 1 A.U., Series D.

SGD 460 Part II (Comprehensive)

MISCELLANEOUS DATA

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ACTIVE REGIONS

CARRINGTON ROTATION 1719

(February 25 to March 25, 1982)

Region No.	Coordinates Lat.	Long.	IMP	Age at CMP	Spot-less Region	Region No. in Rotation 1718	Activity at West Limb	
1	12°N	354	2	>6			decreasing	
2	15°S	352	1	+5	x		disappeared	
3	11°S	350	1	+2	x		decreasing	
4	7°S	345	3	>6			decreasing	
5	11°S	345	1	>6	x	3	dispersed	
6	18°S	335	1	>6	x		disappeared	
7	13°N	333	1	>6	x	5+6	decreasing	
8	13°S	333	1	>6		8	decreasing	
9	23°N	329	1	>6	x	5	decreasing	
10	13°S	322	3	>6			decreasing	
11	6°N	318	1	>6	x		dispersed	
12	6°N	315	2	+5			decreasing	
13	15°S	309	2	+2			decreasing	
14	25°N	310	1	>6	x		dispersed	
15	16°N	306	4	>6			decreasing	
16	4°S	300	2	-1			decreasing	
17	8°S	300	3	>6		13	decreasing	
18	17°S	300	1	>6	x		decreasing	
19	10°N	297	2	>6			decreasing	
20	18°N	288	5	>6		14	decreasing	
21	17°S	282	1	>6	x		decreasing	
22	28°S	275	1	>6	x		dispersed	
23	13°S	270	5	+3			decreasing	
24	21°S	268	6	>6			decreasing	
25	14°N	254	1	-4	x		?	
26	7°S	249	1	+5	x		disappeared	
27	6°S	226	2	+1			decreasing	
28	8°S	217	1	>6	x	29	decreasing	
29	17°S	208	1	>6	x		decreasing	
30	10°S	199	2	>6		32	decreasing	
31	28°N	197	1	+2	x		disappeared	
32	13°S	193	2	>6			decreasing	
33	17°S	190	1	>6	x		decreasing	
34	9°N	188	2	>6			decreasing	
35	3°N	180	5	>6			decreasing	
36	9°N	180	1	>6	x		decreasing	
37	9°S	178	1	>6	x	36	dispersed	
38	24°N	171	2	0			decreasing	
39	14°S	169	1	>6	x	38	dispersed	
40	19°S	162	1	>6	x	39	decreasing	
41	14°S	160	2	>6			decreasing	
42	16°N	160	1	>6	x	42	dispersed	
43	3°S	124	1	+4	x		dispersed	
44	1°N	120	3	>6			decreasing	
45	4°N	119	3	+4			decreasing	
46	15°S	119	1	>6	x	43	dispersed	
47	12°N	116	4	>6			decreasing	
48	7°N	114	1	>6	x	44	decreasing	x
49	2°N	108	2	-3			decreasing	
50	7°S	106	6	>6			stable	
51	3°N	101	2	>6		47	decreasing	
52	7°N	100	5	>6			decreasing	
53	8°S	92	1	+4	x		dispersed	
54	14°N	85	1	>6	x		dispersed	
55	14°N	82	3	+2			decreasing	
56	11°S	75	4	>6			stable	
57	13°N	68	1	>6	x	52	dispersed	
58	19°N	59	1	>6	x	52	dispersed	
59	5°N	43	1	+4	x		disappeared	
60	22°S	41	1	>6	x		dispersed	
61	17°N	35	2	>6			decreasing	
62	8°N	28	1	>6	x		dispersed	
63	3°N	19	4	>6			decreasing	
64	8°N	9	1	>6	x	57	dispersed	
65	13°N	4	2	+5			decreasing	
66	14°S	4	3	>6			decreasing	

ACTIVE REGIONS

CARRINGTON ROTATION 1720

(March 25 to April 21, 1982)

Region No.	Coordinates Lat.	Long.	IMP	Age at CMP	Spot-less Region	Region No. in Rotation 1719	Activity at West Limb
1	7°S	350	1	>6	x	4	decreasing
2	16°S	339	2	+3			decreasing
3	12°S	338	1	>6	x	8	decreasing
4	14°S	327	1	>6	x	10	dispersed
5	24°N	321	1	>6	x		decreasing
6	19°N	320	2	>6			decreasing
7	12°S	318	4	>6			decreasing
8	18°N	315	2	-4			stable
9	11°N	309	6	>6			decreasing
10	17°S	306	3	>6			decreasing
11	20°N	305	1	>6	x		decreasing
12	6°S	304	1	>6	x	16-17	dispersed
13	16°S	298	4	+4			decreasing
14	5°N	296	1	+5	x		dispersed
15	12°N	291	1	>6	x		decreasing
16	20°N	283	1	>6	x	20	decreasing
17	16°S	281	1	>6	x	21	dispersed
18	22°S	279	3	>6			decreasing
19	8°S	274	1	>6	x		dispersed
20	17°S	269	2	>6			decreasing
21	18°N	268	3	0			decreasing
22	14°S	260	1	+2	x		decreasing
23	10°N	259	1	+2	x		disappeared
24	14°N	258	1	+5	x		disappeared
25	19°N	258	2	+6			decreasing
26	24°S	256	1	>6	x	24	dispersed
27	9°S	231	2	+1			decreasing
28	9°S	227	1	>6	x	27-28	dispersed
29	18°S	217	3	>6			decreasing
30	20°S	213	2	+1			decreasing
31	20°S	209	1	>6	x	29	disappeared
32	10°S	203	1	>6	x	30	disappeared
33	7°N	201	2	+5			dispersed
34	12°S	192	1	-4	x		stable
35	7°N	191	3	-2			increasing
36	3°N	183	2	>6		35	decreasing
37	10°N	180	2	>6			dispersed
38	9°N	164	1	>6	x		dispersed
39	8°N	159	3	>6			decreasing
40	15°S	159	3	>6			decreasing
41	21°S	158	1	>6	x		decreasing
42	7°S	145	1	>6	x		disappeared
43	5°S	130	1	>6	x		dispersed
44	3°N	129	1	>6	x	44	decreasing
45	5°S	124	2	-3			decreasing
46	16°N	123	5	-3			decreasing
47	3°S	120	3	>6			decreasing
48	9°S	112	2	>6		50	decreasing
49	11°N	111	4	>6			decreasing
50	3°N	106	3	>6			decreasing
51	27°S	100	4	+5			decreasing
52	21°N	86	2	-1			disappeared
53	16°N	82	2	>6		53	disappeared
54	12°S	79	2	>6			decreasing
55	8°S	75	3	>6		56	decreasing
56	9°S	72	1	>6	x		dispersed
57	16°N	55	1	>6	x		dispersed
58	18°S	53	4	+3			decreasing
59	5°S	41	1	-5	x		?
60	25°S	38	1	>6	x	60	dispersed
61	4°N	24	3	>6		63	decreasing
62	5°S	5	2	-3			stable
63	14°S	1	1	>6	x	66	dispersed
64	7°S	0	1	>6	x		dispersed

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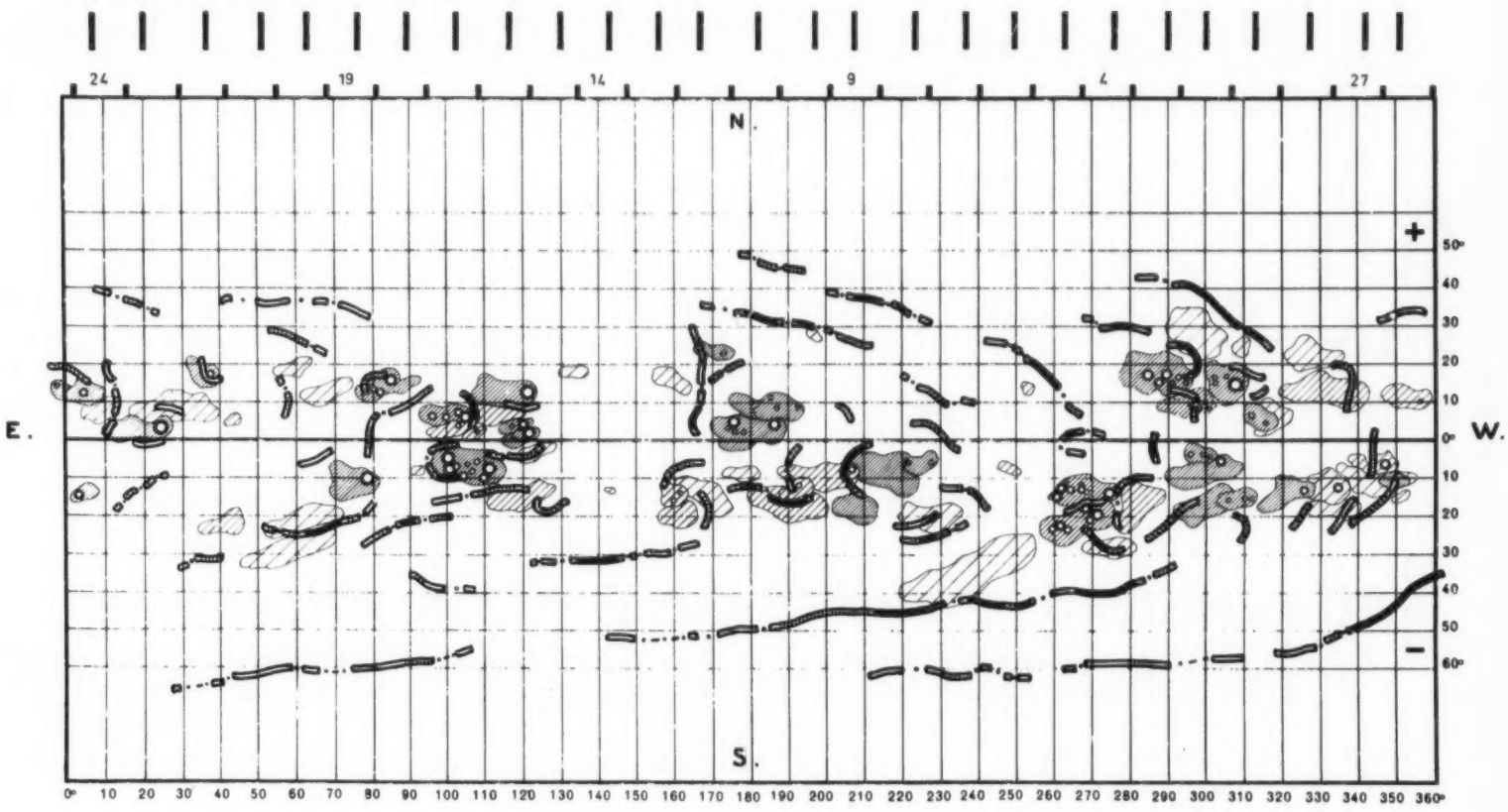
SYNOPTIC SOLAR MAP

CARRINGTON ROTATION 1719

FEBRUARY 25 - MARCH 25, 1982

MEUDON OBSERVATORY

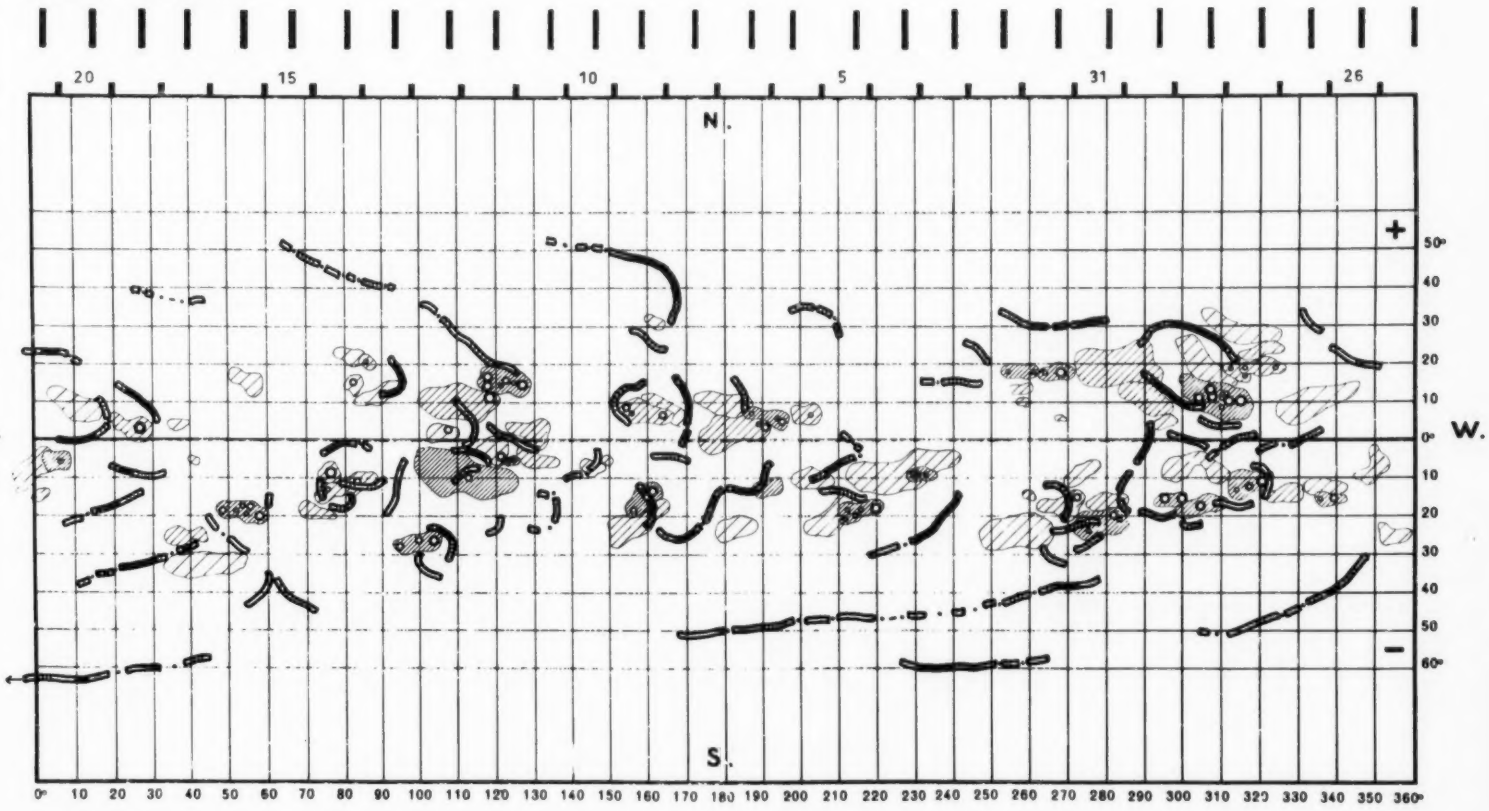


SYNOPTIC SOLAR MAP

CARRINGTON ROTATION 1720

MARCH 25 – APRIL 21, 1982

MEUDON OBSERVATORY



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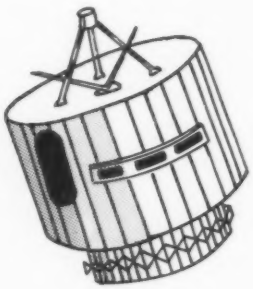
DATA ANNOUNCEMENT

SPACE ENVIRONMENT DATA from the SMS & GOES SATELLITES

The Space Environment Monitor instrument package on-board all SMS/GOES satellites has provided magnetometer, energetic particle, and soft X-ray data continuously since July 1974. Two SMS/GOES satellites operate simultaneously in the Earth's equatorial plane. They travel in geosynchronous orbit (6.67 Earth radii) and are generally located at 75° and 135° west longitude. This trajectory allows the detectors an unobstructed view of the Sun for all but the few dozen hours per year that the Earth eclipses the Sun. The time resolution for all three sensors is approximately 3 seconds, which permits one month's data from each sensor to be stored on a single 9-track, 1600-BPI, binary tape. Plots are available on microfilm.

MAGNETOMETER

A twin fluxgate spinning sensor allows representation of the Earth's magnetic field in three mutually perpendicular components: H_p, H_e and H_n. H_p is parallel to the satellite spin axis, which is itself perpendicular to the satellite's orbital plane. H_e lies parallel to the satellite-Earth center line and points earthward. H_n is perpendicular to both H_p and H_e, and points westward. Field strength changes as small as 0.2 gamma can be measured.



PARTICLE DETECTOR

Solid state detectors with pulse height discrimination measure protons from 0.8 to 500 MeV, alpha particles from 4.0 to 392 MeV, and electrons with kinetic energies greater than or equal to 2.0 MeV. Since solar protons and alpha particles in these energy ranges accelerated in solar flares can reach the vicinity of Earth, they pose a hazard to manned space flight and to high-altitude aircraft. They can as well significantly affect the high-latitude ionosphere.

X-RAY DETECTOR

Ion chamber detectors provide whole Sun fluxes for the 0.5-to-4 and 1-to-8 Angstrom X-ray wavelength bands. These observations furnish a sensitive means of detecting the start of solar flares and thereby changes in the dayside ionosphere.

Address your inquiries to Mrs. Viola Miller, National Geophysical Data Center, NOAA code D631, 325 Broadway, Boulder, Colorado 80303, USA (Telephone (303) 497-6136, FTS 320-6136).